



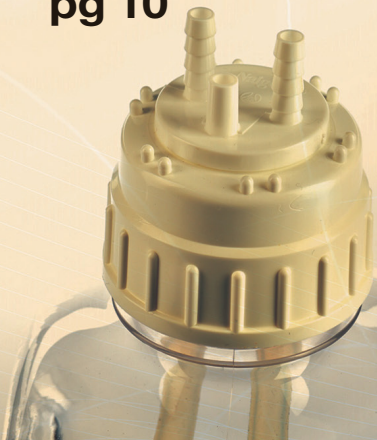
## Thermo Scientific Laboratory Consumables Catalog

Bioproduction | Cell Culture | Diagnostics  
Filtration | General Labware | IVF  
Microplates for Drug Discovery | Packaging  
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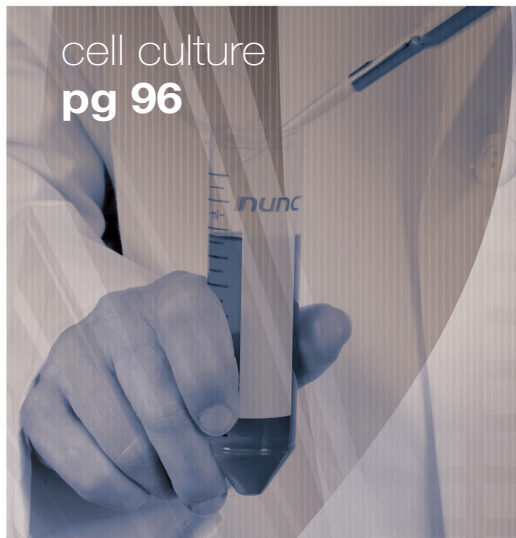
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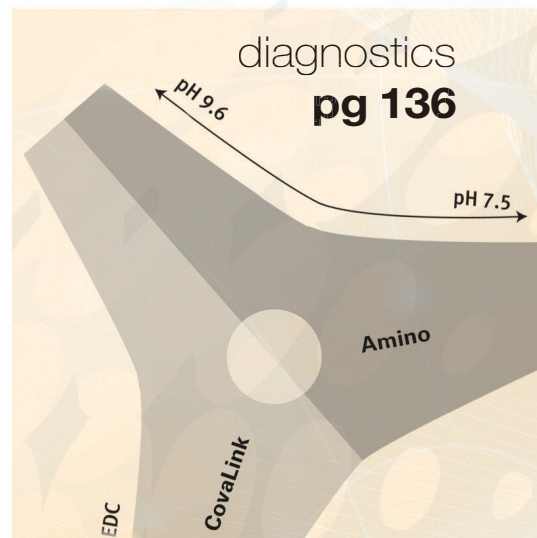
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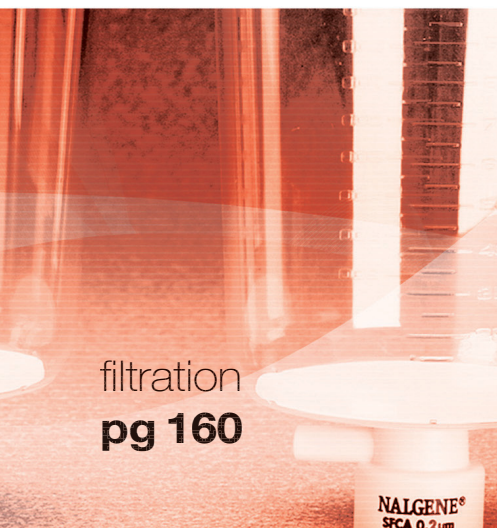
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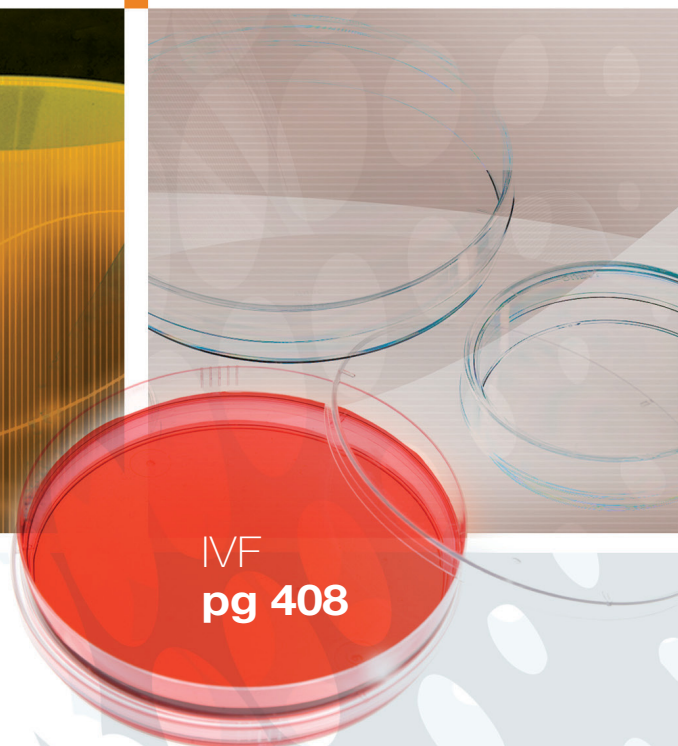
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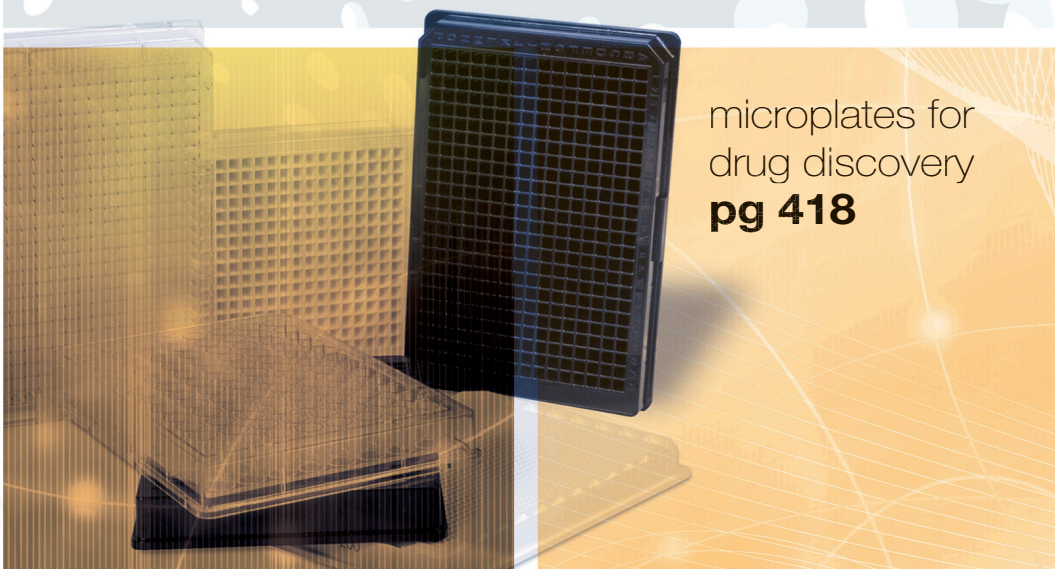


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# Thermo Scientific Laboratory Consumables Catalog

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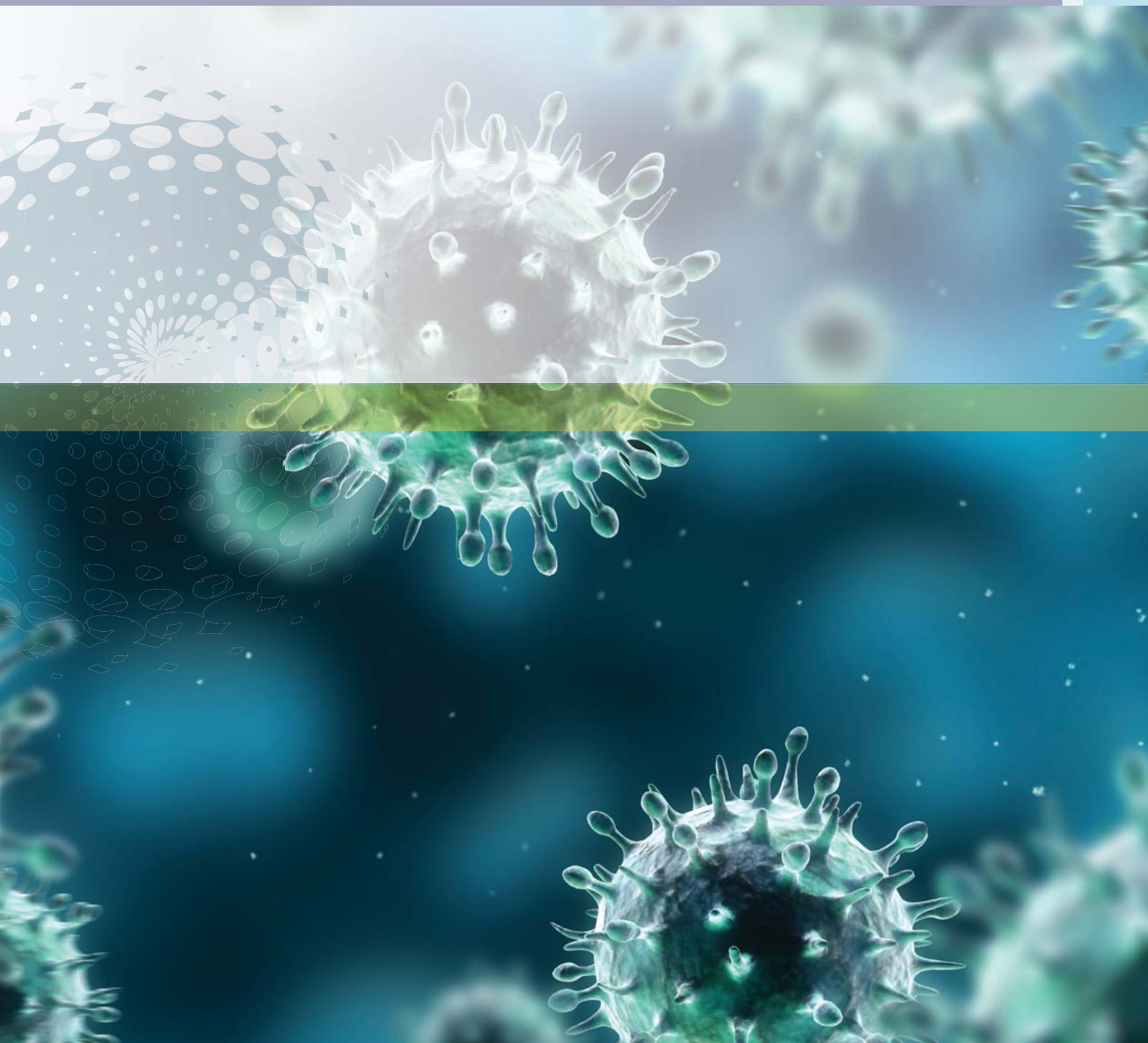
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Biopharmaceutical companies worldwide face enormous regulatory pressures throughout their production workflow. And as new drugs, vaccines and other biologicals are approved, the need becomes critical to standardize on consumables that offer uncompromised integrity.

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## ► Thermo Scientific Nalgene Sterile Square Storage Bottles with Closures

polyethylene terephthalate copolyester, white high-density polyethylene closures



**Nalgene™ PETG Square Storage Bottles are heavy-walled and durable, ideal for storage and sampling of active pharmaceutical ingredients and bulk intermediates.**

Well suited for the preparation and containment of buffers, culture media and general laboratory solutions.

PETG's enhanced material properties feature low permeability to CO<sub>2</sub>/O<sub>2</sub> and provide longer-term storage of pH-sensitive contents.

### details

- Made from durable, break-resistant PETG
- Suitable for frozen storage down to -40°C
- Leakproof† bottles and closures are provided sterile and non-pyrogenic
- Eliminates costly washing, depyrogenation and autoclaving steps
- Available in low particulate format
- Supported by extensive validation documentation

**Ordering Information:** Packed in shrink-wrapped trays.

**Compliance:** USP Class VI, non-cytotoxic, USP <661>, non-pyrogenic, FDA 21CFR 177.1315.

*† The term "leakproof" applies to Thermo Scientific Nalgene products that meet the following criteria: a) Bottle/flask/funnel closure systems with closures smaller than 100 mm, after they are filled with water, inverted, withstand air pressure of 2 psig for 2 minutes, and no water escapes;. b) Bottle/funnel/flask closure systems of larger than 100 mm after they are filled with water, inverted for 15 minutes, and no water escapes. Note: these tests, using other liquids, may not yield the same results. To ensure safe usage, customers are advised to test Thermo Scientific Nalgene bottles and closures under conditions of their planned applications. Thermo Scientific Nalgene products are leakproof at ambient temperature and pressure when used with their Nalgene closures.*

### Nalgene Square Storage Bottles with Closures

Cat. No.	Nominal Capacity, mL (oz.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2019-0030	30 (1)	20	38 Square	64	24	96
2019-0060	60 (2)	24	41 Square	82	24	96
2019-0125	125 (4)	38-430	52 Square	108	24	48
2019-0250	250 (8)	38-430	59 Square	144	24	48
2019-0500	500 (16)	38-430	73 Square	178	12	24
2019-1000	1000 (32)	38-430	92 Square	219	12	24
2019-2000	2000 (64)	53B	116 Square	271	6	12

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## ► Thermo Scientific Nalgene Certified Clean Containers

polyethylene terephthalate copolyester, high-density polyethylene closures



**Nalgene™ PETG Certified Clean Containers are specifically designed for cleanroom applications.**

Ideal for processing and storing critical reagents and bulk intermediates such as vaccines and protein therapeutics. The bottles are lot to lot tested and certified using liquid particulate count analysis for particulate control as specified in the following international compendia: USP <788>, EP 2.9.19 and JP 14th edition Part 1, Section 24.

### details

- Manufactured in a ISO 14644-1 Class 7 certified clean room
- Comprised of resins that are free of animal derived components
- Sterile, tamper-resistant seal ensures product integrity prior to use
- Supported by extensive validation documentation
- Certified sterile and non-pyrogenic, eliminating costly cleaning and associated validations

**Certifications:** USP <788>, EP 2.9.19 and JP 14th edition Part 1, Section 24.

**Compliance:** USP Class VI, non-cytotoxic, USP <661>, non-pyrogenic, FDA 21CFR 177.1315.

### Nalgene Certified Clean Containers

Cat. No.	Nominal Capacity, mL (oz.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
382019-0030	30 (1)	20	38 Square	64	6	72
382019-0060	60 (2)	24	41 Square	82	6	72
382019-0125	125 (4)	38-430	52 Square	108	6	48
382019-0250	250 (8)	38-430	59 Square	144	6	48
382019-0500	500 (16)	38-430	73 Square	178	4	24
382019-1000	1000 (32)	38-430	92 Square	219	4	24
382019-2000	2000 (64)	53B	116 Square	271	1	12





## ► Heat-Shrink Bands for Thermo Scientific Nalgene Square PETG Storage Bottles polyvinyl chloride



The heat-shrink bands found on Nalgene™ Sterile Square PETG Storage Bottles provide a tamper-resistant seal to ensure the integrity of the bottle contents.

Simply apply the recommended application torque for Nalgene closures, and slide the heat-shrink band over the closure and bottle neck; heat the band to shrink and secure contents.

### details

- Gamma stable and include a perforated “tear strip” feature for easy removal
- Available in 4 sizes to mate with Nalgene PETG Square Storage Bottles
- Packed 1,000 per case (two zipper bags of 500 each)

### Heat-Shrink Bands for Nalgene Square PETG Storage Bottles

Cat. No.	Description	Closure Size, mm	No. per Pack	No. per Case
312160-0200	Fits 30 mL Square PETG Storage Bottle	20-415	500	1000
312160-0240	Fits 60 mL Square PETG Storage Bottle	24-415	500	1000
312160-0384	Fits 125 - 1000 mL Square PETG Storage Bottles	38-430	500	1000
312160-0530	Fits 2000 mL Square PETG Storage Bottle	53B	500	1000



## ► Thermo Scientific Nalgene InVt<sup>ro</sup> Biotainer<sup>™</sup> Bottles

polyethylene terephthalate copolyester, polyethylene foam lined polypropylene closures



**Nalgene<sup>™</sup> InVt<sup>ro</sup><sup>™</sup> Biotainer<sup>™</sup> Bottles are molded of crystal clear PETG.**

Ideal for prolonged storage of pH sensitive materials such as culture media. InVt<sup>ro</sup> Biotainer Bottles are certified sterile and ready to use. They eliminate the cost of cleaning, sterilizing and its associated validations, compared to bottles designed for re-use.

### details

- Constructed of durable, crystal clear PETG – ensuring sample integrity
- Closures feature a PE foam core liner for leakproof assurance
- Customization options available for fluid transfer applications
- Supported by extensive validation documentation
- PETG Biotainers are suitable for storage in conditions from -40°C to +70°C

**Compliance:** USP Class VI, non-cytotoxic, USP <661>, non-pyrogenic, FDA 21CFR 177.1315.

### Nalgene InVt<sup>ro</sup> Biotainer Bottles

Cat. No.	Nominal Capacity, mL	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
3025-42	125	38	52 Square	105	5	100
3005-42	500	38	77 Square	176	5	70
3005-70	500	38	77 Square	176	35	70
3110-35	1000	48	98 Square	201	35	35
3110-42	1000	48	98 Square	201	5	35
3230-20	2000	48	116 Square	265	20	20
3230-42	2000	48	116 Square	265	5	20
3415-16	5 L	48	166 Square	299	1	6
3415-42	5 L	48	166 Square	299	6	6

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## ► Thermo Scientific Nalgene InVitro Biotainer Bottles

light blue polycarbonate, silicone lined polypropylene closures



**Nalgene™ InVitro™ Biotainer™ Bottles are excellent for freezing applications.**

Nalgene InVitro Biotainer Bottles are designed specifically for pharmaceutical and biological manufacturers. Supplied sterile and ready to use, they reduce the risk of carry-over contamination and eliminate the cost of cleaning, sterilization, and associated validations.

### details

- Constructed of durable, translucent PC – ensuring the integrity of your sample
- Closures feature a silicone liner for leakproof<sup>†</sup> assurance
- Customization options available for fluid transfer applications
- Supported by extensive validation documentation
- Suitable for use in storage conditions of -100°C to +100°C

**Compliance:** USP Class VI, non-cytotoxic, USP <661>, non-pyrogenic, FDA 21CFR 177.1315.

### Nalgene InVitro Biotainer Bottles

Cat. No.	Nominal Capacity, mL	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
3030-42	125	38	77 Square	176	5	50
3110-42	1000	48	98 Square	201	5	35
3110-35	1000	48	98 Square	201	35	35
3233-42	2000	48	116 Square	265	5	20
3405-16	5 L	48	166 Square	299	1	6
3405-42	5 L	48	166 Square	299	6	6
3500-20*	20	20	29.7 Round	68.5	500	500

\* Validation vial

## ► Thermo Scientific Nalgene Biotainer Replacement Closures

polypropylene with silicone liner



**Nalgene™ Biotainer Replacement Closures for 1 L, 2 L, 5 L, 10 L and 20 L PC Biotainer bottles and carboys.**

### details

- PP with silicone liner
- Closure size: 48 mm
- Sterile

### Nalgene Biotainer Replacement Closures

Cat. No.	Description	Closure Size, mm	No. per Pack	No. per Case
362515-0480	Silicone-Lined Replacement Closures, sterile	48	1	300





## ► Thermo Scientific Nalgene InVitro Biotainer Bottles

high-density polyethylene, silicone lined polypropylene closures



**Nalgene™ HDPE InVitro™ Biotainer™ Bottles are well suited for storage and transport of biological solutions.**

HDPE Biotainer Bottles offer excellent chemical resistance, and are certified sterile and ready-to-use. They eliminate the cost of cleaning, sterilizing and its associated validations compared to bottle designed for reuse.

### details

- Closures feature a silicone liner for leakproof<sup>†</sup> assurance
- Supported by extensive validation documentation
- Suitable for storage in conditions of -100°C to +120°C

**Compliance:** USP Class VI, non-cytotoxic, USP <661>, non-pyrogenic, FDA 21CFR 177.1520.

### Nalgene InVitro Biotainer Bottles

Cat. No.	Nominal Capacity, L	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
3750-24*	4	38	143 Square	299	8	24
3751-24	4	38	143 Square	299	24	24
3751-42	4	38	143 Square	299	8	24

\* Shrinkband

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## ► Thermo Scientific Nalgene Autoclavable Carboys with Handles

polypropylene, white polypropylene closure, thermoplastic elastomer gasket



**Nalgene™ Autoclavable Carboys with Handles** are ideal for the containment of media, bulk pharmaceutical ingredients and other solutions.

### details

- Convenient shoulder handles allow easy carrying and pouring
- Available in 10, 20, and 50 L sizes for a variety of biopharmaceutical applications
- Graduated to contain in liters and gallons
- Autoclavable/Graduated/Leakproof†

**Related Products:** Additional closure options include Nalgene Quick Filling/Venting Closures (Cat. No. 2158), Nalgene Filling/Venting Closures (Cat. No. 2162), Nalgene Top Works Fluid Transfer Systems (Cat. No. 2135) and Nalgene 30 mL Validation Bottle for material compatibility studies (Cat. No. DS2126-0030).

Additional accessories include Nalgene Barbed Bulk Head Fittings (Cat. No. 6149).

### Nalgene Autoclavable Carboys with Handles

Cat. No.	Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2250-0020	10 (2.5)	12 (3)	83B	250	389	1	6
2250-0050	20 (5)	22.5 (5.5)	83B	282	526	1	4
2250-0130	50 (13)	54 (14)	83B	379	678	1	1



## ► Thermo Scientific Nalgene Heavy Duty Vacuum Carboys

polypropylene, white polypropylene closure, thermoplastic elastomer gasket



**Nalgene™ Heavy Duty Vacuum Carboys** are ideal when service conditions are most extreme.

Useful as a vacuum trap; will hold a vacuum for 8 hours.

### details

- Not rated for pressure use
- Customization options are available for fluid transfer applications
- Autoclavable/Leakproof†

### Related Products:

**Related Products:** Additional closure options include Nalgene Quick Filling/Venting Closures (Cat. No. 2158), Nalgene Filling/Venting Closures (Cat. No. 2162), Nalgene Top Works Fluid Transfer Systems (Cat. No. 2135) and Nalgene 30 mL Validation Bottle for material compatibility studies (Cat. No. DS2126-0030).

Additional accessories include Nalgene Barbed Bulkhead Fittings (Cat. No. 6149).

For 1-5 L sizes, please refer to Nalgene Heavy Duty Vacuum Bottles (Cat. No. 2126).

### Nalgene Heavy Duty Vacuum Carboys

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	No. per Pack	No. per Case
2226-0020	10 (2.5)	12 (3)	83B	250	1	6
2226-0050	20 (5)	22.5 (5.5)	83B	282	1	4

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## ► Thermo Scientific Nalgene Round Clearboys

polycarbonate, white polypropylene closure, thermoplastic elastomer gasket



**Nalgene™ Round Transparent Clearboys™ are durable, lighter and safer than glass.**

Useful for large-volume media and culture preparation, especially where visual inspection of contents for quality is important. Ideal for refrigerated or frozen storage of aqueous solutions such as sterile water, reagents and media.

### details

- Available in 10 L and 20 L sizes for a variety of biopharmaceutical applications
- Graduated to contain in liters and gallons
- Molded of transparent, durable polycarbonate
- Customization options available for fluid transfer applications
- Autoclavable/Graduated/Leakproof†

**Related Products:** Additional closure options include Nalgene Quick Filling/Venting Closures (Cat. No. 2158), Nalgene Filling/Venting Closures (Cat. No. 2162) Nalgene Top Works™ Fluid Transfer Systems (Cat. No. 2135) and Nalgene Validation Bottles (Cat. No. DS2127).

Additional accessories include Nalgene Barbed Bulk Head Fittings (Cat. No. 6149).

### Nalgene Round Transparent Clearboys

Cat. No.	Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2251-0020	10 (2.5)	12.5 (3.3)	83B	253	394	1	4
2251-0050	20 (5)	24 (6)	83B	287	536	1	4



## ► Thermo Scientific Nalgene Validation Bottles

transparent polycarbonate, white polypropylene closures, TPE gasket



**Nalgene™ Validation Bottles are the ideal size to perform material compatibility validation studies for Nalgene PC Carboys.**

### details

- Molded of durable translucent polycarbonate, ensuring the integrity of your samples
- Manufactured with all the same materials and molding processes as Nalgene PC Carboys (Cat. No. 2251)
- Accommodates convenient material compatibility validation requiring less amounts of expensive reagents
- Autoclavable

### Nalgene Validation Bottles

Cat. No.	Nominal Capacity, mL (oz.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
DS2127-0030	30 (1)	20-415	32	75	1	30
DS2127-0250	250 (8)	53B	74	135	1	6
DS2127-2000	2000 (64)	53B	123	296	1	12



## ► Thermo Scientific Nalgene Round Carboys

low density polyethylene, white polypropylene closure



**Nalgene™ LDPE Round Carboys** are an ideal choice for storage and transport of reagents.

### details

- Wide shoulder handles allow for easy pouring and carrying with gloved hands
- Graduation to contain in liters and gallons
- Accepts 13.5 rubber stopper for alternative sealing method
- Leakproof†

**Related Products:** Additional closure options include Nalgene Quick Filling/Venting Closures (Cat. No. 2158), Nalgene Filling/Venting Closures (Cat. No. 2162), Nalgene Top Works Fluid Transfer Systems (Cat. No. 2135) and Nalgene 30 mL Validation Bottle for material compatibility studies (Cat. No. DS2126-0030).

### Nalgene Round Carboys

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2210-0020	10 (2.5)	12 (3)	83B	250	389	1	6
2210-0040	15 (3.75)	17	83B	285	429	1	4
2210-0050	20 (5)	22.5 (5.5)	83B	282	526	1	4
2210-0065	25 (6.5)	27.5	83B	287	594	1	4
2210-0130	50 (13)	54 (14)	83B	379	668	1	1

## ► Thermo Scientific Nalgene Fluorinated Carboys

high-density polyethylene, white polypropylene closure



**Nalgene™ HDPE Fluorinated Carboys** enhance long-term container performance, prevent permeation loss and yield lower extracatables.

Fluorination improves barrier properties and reduces solvent absorption and penetration.

### details

- Heavy-duty walls are safe, durable and resistant to splitting and punctures
- Fluorocarbon surfaces inside and out
- Graduated/Leakproof†

### Nalgene Fluorinated Carboys

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2097-0020	10 (2.5)	12 (3)	83B	250	389	1	6
2097-0050	20 (5)	22.5 (5.5)	83B	282	526	1	4





## ► Thermo Scientific Nalgene Amber Carboy

high-density polyethylene, amber polypropylene closure



**Nalgene™ Amber Carboys are an ideal choice for storing and mixing photosensitive chemicals, reagents, buffers and standards.**

Meets the U.S. Pharmacopoeia Light Transmission Test (USP latest edition) requirements for storage of light-sensitive materials.

### details

- Molded of opaque amber HDPE, offering excellent chemical resistance
- Convenient wide shoulder handles
- Leakproof†

### Nalgene Amber Carboy

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2256-7020	10 (2.5)	12 (3)	83B	250	383	1	6

► **Thermo Scientific Nalgene InVitro Biotainer Carboys**  
light blue polycarbonate; silicone lined polypropylene closure



**Nalgene™ PC InVitro™ Biotainer™ Carboys are excellent for freezing applications.**

Designed specifically for pharmaceutical and biological manufacturers, Nalgene InVitro Biotainer Carboys are supplied sterile and ready to use. They reduce the risk of carry-over contamination and eliminate the cost of cleaning, sterilizing and associated validations.

#### details

- Constructed of durable, translucent PC – ensuring the integrity of your sample
- Closure features a silicone-lined closure for leakproof assurance
- Suitable for use in storage conditions of -100°C to +100°C
- Supported by extensive validation documentation
- Customization options available for fluid transfer applications

**Compliance:** USP Class VI, non-cytotoxic, USP <661>, non-pyrogenic, FDA 21CFR 177.1520.

#### Nalgene InVitro Biotainer Carboys

Cat. No.	Nominal Capacity, L	Closure Size, mm	No. per Pack	No. per Case
3410-42	10	48	1	2
3410-08*	10	48	1	2
3423-42	20	48	1	3

\* with polyethylene handle

► Custom Tubing Sets are available.  
Please refer to the Thermo Scientific  
Online Custom Tubing Set Configurator at  
[www.thermoscientific.com/tubingconfigurator](http://www.thermoscientific.com/tubingconfigurator)



## ► Thermo Scientific Nalgene Single-Use Carboy

high-density polyethylene, white polypropylene closure



**Nalgene™ Single-Use HDPE Carboys** are safer than glass and are the ideal containers to economically maintain and transfer sterile fluids and reagents.

Sterile, ready-to-use carboys for one-time use.

### details

- Wide-mouth design for easy filling and dispensing of liquids
- Suitable for use in storage conditions of -100°C to +120°C
- Molded of HDPE offering excellent chemical resistance and impact resistance
- Customization options available for fluid transfer applications
- Supported by extensive validation documentation
- Leakproof†

**Ordering Information:** Optional stainless steel handle available (2229-0001).

**Compliance:** USP Class VI, non-cytotoxic.

Nalgene Single-Use Carboy

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
342289-0050	20 (5)	23 (6)	83B	284	502	1	6

## ► Thermo Scientific Nalgene Handle for Single-Use Carboy

stainless steel



**Nalgene™ Handle for Single-Use Carboy** attaches for easy transport.

### details

- For use with Nalgene Sterile Single Use Carboy (Cat. No. 342889-0050)

Nalgene Handle for Single-Use Carboy

Cat. No.	Description	Material	No. per Case
2229-0001	Handle for 20 L Single-Use Carboy	Stainless Steel	1



► **Thermo Scientific Nalgene Autoclavable Wide-Mouth Carboys with Handles**  
polypropylene, white polypropylene closure



**Nalgene™ Autoclavable Wide-Mouth Carboys with Handles** have a convenient large opening for storage and transport of solids and powders.

**details**

- Convenient wide shoulder handles
- Allows easy carrying and pouring, even with gloved hands
- Graduated to contain liters and gallons
- Wide-mouth opening promotes ease of cleaning and dispensing
- Autoclavable/Graduated/Leakproof†

**Nalgene Autoclavable Wide-Mouth Carboys with Handles**

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2235-0020	10 (2.5)	3 (12)	100-415	250	343	1	6
2235-0050	20 (5)	5.5 (22.5)	100-415	282	483	1	4





## ► Thermo Scientific Nalgene Wide-Mouth Carboys with Handles

low density polyethylene, white polypropylene closures



**Nalgene™ LDPE Wide-Mouth Carboys with Handles have a convenient large opening for storage and transport of solids and powders.**

### details

- Convenient wide shoulder handles allow easy carrying and pouring, even with gloved hands
- Graduated to contain in liters and gallons
- Wide-mouth opening promotes ease of cleaning and dispensing, and can accommodate overhead mixers
- Graduated/Leakproof†/ Not Autoclavable\*

**Ordering Information:** \*For Autoclavable Wide-Mouth Carboys, please refer to Cat. No. 2235.

### Nalgene Wide-Mouth Carboys with Handles

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2234-0020	10 (2.5)	12 (3)	100-415	250	343	1	6
2234-0030	15 (4)	17	100-415	286	389	1	6
2234-0050	20 (5)	22.5 (5.5)	100-415	282	483	1	4

## ► Thermo Scientific Nalgene Sanitary Carboys polypropylene



**Nalgene™ Sanitary Polypropylene Carboys with 3-inch sanitary neck have a non-threaded design.**

The 3 in. flange accepts standard tri-clover style fittings. A clamping-closure system securely seals the carboy, requiring no torque while eliminating back-off issues.

### details

- Sanitary design is easier to clean than threaded alternatives
- To seal closure, use a combination of gasket, end cap and sealing clamp
- Available in 10, 20 and 50 L sizes, supporting a variety of containment needs

**Related products:** PP End Caps (Cat. No. 2665-0300), Ported End Caps (Cat. No. 2688-2075 and 2689-2075), True Union Clamps (Cat. No. 2670-0300), Gaskets (Cat. No. 2672-0300).

### Nalgene Carboys with 3 in. Sanitary Neck Design

Cat. No.	Nominal Capacity, L (gal.)	Neck Finish	O.D., mm	Height with Ferrule, mm	No. per Pack	No. per Case
2630-0010	10 (2.5)	3- in. Tri Clover	250	353	1	1
2630-0020	20 (5)	3- in. Tri Clover	282	496	1	1
2630-0050	50 (13)	3- in. Tri Clover	379	545	1	1

## ► Thermo Scientific Nalgene Sanitary Carboy polycarbonate



**Nalgene™ Sanitary Carboy is a one-piece molded, non-threaded, design for use as receiver or dispensing vessel in biopharmaceutical applications.**

The 3 in. flange accepts standard tri-clover style fittings. A clamping-closure system securely seals the carboy, requiring no torque while eliminating back-off issues.

### details

- Sanitary design is easier to clean than threaded alternatives
- Molded of same PC resin as Nalgene PC Clearboys and PC Bottles, supporting a switch to Sanitary PC Carboys without material validation issues
- To seal closure, use a combination of gasket, end cap and sealing clamp
- Sanitary Carboy also available in PP (Cat. No. 2630)
- Graduated/Autoclavable

**Related products:** PP End Caps (Cat. No. 2665-0300), Ported End Caps (Cat. No. 2688-2075 and 2689-2075), True Union Clamps (Cat. No. 2670-0300), Heavy Duty Clamp (Cat. No. 2685-0300), Gaskets (Cat. No. 2672-0300).

### Nalgene Sanitary Carboy

Cat. No.	Nominal Capacity, L (gal.)	Neck Finish	O.D., mm	Height with Ferrule, mm	No. per Pack	No. per Case
2261-0050	20 (5)	3 in. Tri Clover	287	498	1	4



## ► Thermo Scientific Nalgene Autoclavable Carboys with Sanitary Flange

polypropylene, white polypropylene closure, thermoplastic elastomer gasket



**Nalgene™ Autoclavable Carboys** feature a 1-1/2 in. secure, non-threaded sanitary dispensing port. They are ideal for use as a supply reservoir.

### details

- Convenient molded-in handles for each handling
- Graduated to contain in liters and gallons
- Dispensing port used in combination with 1-1/2 in gasket and True Union Clamp
- Autoclavable/Graduated/Leakproof†

**Compliance:** USP Class VI, non-cytotoxic.

**Related products:** Gasket (Cat. No. 2672-0150), True Union Clamps (Cat. No. 2670-0150).

### Nalgene Autoclavable Carboys Sanitary Flanges

Cat. No.	Nominal Capacity, L (gal.)	Approx Brim Capacity, L (gal.)	Closure Size	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2640-0020	10 (2.5)	12 (3)	83B, 1-1/2 in. Tri Clover	250	389	1	1
2640-0050	20 (5)	22.5 (5.5)	83B, 1-1/2 in. Tri Clover	282	526	1	1
2640-0130	50 (13)	54 (14)	83B, 1-1/2 in. Tri Clover	379	678	1	1

## ► Thermo Scientific Nalgene End Caps polypropylene



**Nalgene™ Polypropylene End Caps** are used to securely close off 3/4 in. mini and 3 in. sanitary ports on Nalgene Sanitary Carboys.

Groove on underside of the end cap accepts standard sanitary gasket for sealing the systems.

### details

- Offers a reliable, repeatable seals when used in combination with silicone gasket (Cat. No. 2672) and True Union Clamp (Cat. No. 2670)
- Autoclavable

**Compliance:** USP Class VI.

**Related products:** PP Sanitary Carboy (Cat. No. 2630), PC Sanitary Carboy (Cat. No. 2261), Silicone Gaskets (Cat. No. 2672), True Union Clamp (Cat. No. 2670), Heavy Duty Clamp (Cat. No. 2685).

### Nalgene End Caps

Cat. No.	Description	No. per Case
2665-0075	End cap for 3/4 in. Mini	1
2665-0300	End cap for 3 in. Tri Clover	1

## ► Thermo Scientific Nalgene End Caps polycarbonate or polypropylene



**Nalgene™ End Caps in PC or PP** provide sanitary ports including 3/4 in. Mini, which offer easy filling and dispensing.

Securely mounts to 3-inch sanitary flange for applications used with Nalgene Sanitary Carboys.

### details

- Available in PC and PP
- Autoclavable
- Offer a reliable, repeatable seals when used in combination with silicone gasket and True Union Clamps
- Customization options available when used with 3/4 in. Mini Hose Barb fitting

**Related products:** PP Sanitary Carboy (Cat. No. 2630), PC Sanitary Carboy (Cat. No. 2261), Silicone Gaskets (Cat. No. 2672), True Union Clamp (Cat. No. 2670), Heavy Duty Clamp (Cat. No. 2685), 3/4 in. Mini Hose Barb fitting (Cat. No. 7210).

### Nalgene End Caps

Cat. No.	Description	Port Size, in.	No. per Pack	No. per Case
2688-2075	PC ported end cap for 3 in. Tri Clover	3/4 in. Mini x 2	1	4
2689-2075	PP ported end cap for 3 in. Tri Clover	3/4 in. Mini x 2	1	4





## ► Thermo Scientific Nalgene Sanitary Gaskets for Thermo Scientific Nalgene Carboys platinum cured silicone



**Nalgene™ Silicone Sanitary Gaskets** offers a reliable leakproof seal when used with Nalgene end caps and true-union clamps.

Constructed of Platinum Cured Silicone, the gaskets ensure the highest degree of purity for biopharmaceutical applications.

### details

- For use with Nalgene Carboys (Cat. Nos. 2261, 2630, and 2640)
- Autoclavable

**Related products:** PP Sanitary Carboy (Cat. No. 2630), PC Sanitary Carboy (Cat. No. 2261), Silicone Gaskets (Cat. No. 2672), True Union Clamp (Cat. No. 2670), Heavy Duty Clamp (Cat. No. 2685).

**Compliance:** Meets USP Class VI requirements.

### Nalgene Sanitary Gaskets for Nalgene Carboys

Cat. No.	Description	No. per Pack	No. per Case
2672-0075	Gasket for 3/4 in. Mini	1	6
2672-0150	Gasket for 1-1/2 in. Tri Clover	1	6
2672-0030	Gasket for 3 in. Tri Clover	1	6



## ► Thermo Scientific Nalgene True Union Clamps

polyvinylidene fluoride



**Nalgene™ True Union Clamps** offer reliable, repeatable seals when used in combination with silicone gasket and end caps.

### details

- Constructed of PVDF fluoride
- Autoclavable

**Related products:** PP End Caps (Cat. No. 2665), Ported End Caps (Cat. Nos. 2688-2075 and 2689-2075), and Gaskets (Cat. No. 2672).

### Nalgene True Union Clamps

Cat. No.	Description	No. per Case
2670-0075	True Union Clamp for 3/4 in. Mini	1
2670-0150	True Union Clamp for 1-1/2 in. Tri Clover	1
2670-0300	True Union Clamp for 3 in. Tri Clover	1

## ► Thermo Scientific Nalgene Heavy Duty Clamps

stainless steel



**Nalgene™ Heavy Duty Stainless Steel Clamps** assure leakproof fluid seals for use with Nalgene Sanitary Carboys.

### details

- Strong, spring-loaded clamp
- For use with Nalgene PC Sanitary Carboy (Cat. No. 2261)
- Autoclavable

**Related products:** PP End Caps (Cat. No. 2665-0300), Ported End Caps (Cat. Nos. 2688-2075 and 2689-2075), Gaskets (Cat. No. 2672-0300).

### Nalgene Heavy Duty Stainless Steel Clamps

Cat. No.	Description	No. per Pack	No. per Case
2685-0300	Stainless Steel Clamp for 3 in. Tri Clover	1	1



## ► Thermo Scientific Nalgene Autoclavable Rectangular Carboys polypropylene



**Nalgene™ Rectangular Carboys** are molded of tough, translucent and autoclavable polypropylene. Ideal for storing solutions and handling large volumes of powders and other solid samples.

### details

- Large-neck opening for easy filling and cleaning
- Includes sturdy stainless steel handle attached to molded-in shoulder loops
- Graduated in liters and gallons
- Autoclavable/Graduated/Leakproof†

**Nalgene Autoclavable Rectangular Carboys**

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
2212-0020	9 (2)	9 (2)	100-415	220 x 153 x 360 (9 x 6 x 14)	1	6
2212-0050	20 (5)	21 (5.5)	100-415	320 x 229 x 399 (13 x 9 x 16)	1	4

## ► Thermo Scientific Nalgene Rectangular Clearboys polycarbonate, polypropylene closure



**Nalgene™ Rectangular Clearboys™** are lightweight, space-saving and durable.

These carboys are ideal for storing solutions and handling large volumes of powders and other solid samples.

### details

- Wide-mouth opening permits easy filling, transferring and cleaning
- Graduated to contain in liters and gallons
- Stainless steel handle for ease in transporting containers
- Molded of transparent PC, making this carboy ideal when visual inspection of contents is required
- Autoclavable/Graduated/Leakproof†

**Nalgene Rectangular Clearboys**

Cat. No.	Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
DS2213-0020	9 (2)	9 (2)	100-415	220 x 153 x 360 (9 x 6 x 14)	1	1
DS2213-0050	20 (5)	21 (5.5)	100-415	320 x 229 x 399 (13 x 9 x 16)	1	1

## ► Thermo Scientific Nalgene Rectangular Carboys

high-density polyethylene, polypropylene closure



**Nalgene™ HDPE Rectangular Carboys have a sturdy, space-saving design.**

These carboys are ideal for storing solutions and handling large volumes of powders and other solid samples.

### details

- Graduated to contain liters and gallons
- Wide-mouth opening permits easy filling, transferring and cleaning
- Includes sturdy stainless steel handle attached to molded-in shoulder loops
- Autoclavable/Graduated/Leakproof†

Nalgene Rectangular Carboys without Spigots

Cat. No.	Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
2211-0020	9 (2)	9 (2)	100-415	220 x 153 x 360 (9 x 6 x 14)	1	6
2211-0050	20 (5)	21 (5.5)	100-415	320 x 229 x 399 (13 x 9 x 16)	1	4

## ► Thermo Scientific Nalgene Heavy-Duty Rectangular Carboy

high-density polyethylene, white polypropylene closure



**Nalgene™ HDPE Heavy-Duty Rectangular Carboy has a space-saving, stackable design.**

Rugged carboy for storing and transporting reagents and other liquids.

### details

- Heavy-walled construction for durability and chemical resistance
- Graduated to contain in liters and gallons
- Design includes integral handle for easy transport and pouring
- Graduated/Leakproof†

Nalgene Heavy-Duty Rectangular Carboy

Cat. No.	Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
2214-0050	20 (5)	20 (5)	70	330 x 228 x 406 (13 x 9 x 16)	1	4





## ► Thermo Scientific Nalgene Heavy-Duty Wide Mouth Jug

high-density polyethylene, white polypropylene closure



**Nalgene™ Heavy-Duty Wide Mouth Jug features a large, 120 mm opening.**

Molded-in handle and recessed bottom provide a sturdy grip when lifting and pouring. Wide stance and low center of gravity assure stability.

### details

- Wide-mouth opening permits easy filling, transferring and cleaning of jugs
- Ideal for storing solids or powders
- Graduated to contain in liters and gallons
- Space-saving rectangular shape optimizes limited storage space

Nalgene Heavy-Duty Wide Mouth Jug

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
2241-0050	20 (5)	25 (6.6)	120	305 x 203 x 457 (12 x 8 x 18)	1	4

## ► Thermo Scientific Nalgene Jerricans

high-density polyethylene, white tethered polypropylene closure



**Nalgene™ HDPE Jerricans have a rugged design with wide stance and low center of gravity that provide greater stability.**

### details

- Integral spout is angled for easy, accurate pouring
- Includes tethered closure, preventing loss
- Graduated to contain in liters and gallons
- Molded-in handle and recessed bottom provides a sturdy grip when lifting and pouring
- Space-saving rectangular shape optimizes limited storage space
- Graduated/Leakproof†

Nalgene Jerricans

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
2240-0015	6 (1.5)	8 (2)	53B	213 x 176 x 335 (8 x 7 x 13)	1	6
2240-0025	10 (2.5)	12 (3)	53B	246 x 199 x 376 (10 x 8 x 15)	1	6
2240-0050	20 (5.0)	24 (6)	53B	320 x 245 x 452 (13 x 10 x 18)	1	4

## ► Thermo Scientific Nalgene 13 L Jerrican

high-density polyethylene with tethered polypropylene closure



**Nalgene™ Jerricans have a unique double-spout design, ideal as a reservoir in automated systems.**

Rugged design with wide stance and low center of gravity provides stability.

### details

- 53B closure can be customized with input/output tubing, while the 38 mm closure can be used for refilling and emptying
- Molded-in handle provides a sturdy grip when carrying heavy contents
- Integral shoulder handle and molded bottom grip offers added assistance with lifting
- Molded of HDPE, offering good chemical resistance for a wide variety of solutions
- Space-saving rectangular shape optimizes limited storage space

**Related products:** Nalgene Quick Filling/Venting Closures (Cat. No. 2158), or Nalgene Filling/Venting Closures (Cat. No. 2162)

Additional accessories include Nalgene Barbed Bulkhead Fittings (Cat. No. 6149)

**Compliance:** USP Class VI FDA21 CFR 177.1520.

### Nalgene 13 L Jerrican

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
2243-0013	13 (3.5)	14 (3.7)	53B	290 x 189 x 378 (11 x 7 x 15)	1	4
2243-9013	13 (3.5)	14 (3.7)	53B; 38-430	290 x 189 x 378 (11 x 7 x 15)	1	4



## ► Thermo Scientific Nalgene Fluorinated Jerricans

high-density polyethylene, white polypropylene closure



**Nalgene™ Fluorinated Jerricans have a rugged design with wide stance and low center of gravity that provide greater stability.**

Fluorinated surface inside and out improves barrier properties and reduces solvent absorption while enhancing long-term container performance and prevents loss due to permeation.

### details

- Includes tethered closure preventing loss
- Graduated to contain in liters and gallons
- Molded-in handle and recessed bottom provides a sturdy grip when carrying heavy contents
- Space-saving rectangular shape optimizes limited storage space
- Graduated/Leakproof†

### Nalgene Jerricans

Cat. No.	Nominal Capacity, L (gal.)	Nominal Brim Capacity, L (gal.)	Closure Size, mm	L x W x H, mm (in.)	No. per Pack	No. per Case
2242-0025	10 (2.5)	12 (3)	53B	246 x 199 x 376 (10 x 8 x 15)	1	6
2242-0050	20 (5)	24 (6)	53B	320 x 245 x 452 (13 x 10 x 18)	1	4

## ► Thermo Scientific Nalgene Replacement Closures for Large Carboys and Bottles



**Designed to fit Nalgene™ Carboys and Bottles to provide a guaranteed leakproof system.**

### details

- Fits Nalgene Large Carboys and Bottles with 53B and 83B neck finishes

#### Nalgene Closures for Large Carboys and Bottles; white, autoclavable

Cat. No.	Description	No. per Pack	No. per Case
712160-0384	38-430 Replacement Closure for Large Nalgene Bottles	12	12
712160-0530	53B Replacement Closure for Large Nalgene Bottles or Carboys	12	12
712160-0830	83B Replacement Closure for Large Nalgene Bottle or Carboy	2	2
712160-0053	TPE Gasket for 53B Closure	12	12
712162-1830	TPE Gasket for 83B Closure	5	5

#### Nalgene Replacement Closures; white high-density polyethylene

Cat. No.	Description	No. per Pack	No. per Case
712151-0053	53B Replacement Cap w/ TPE Gasket for Large Nalgene Bottles or Carboys	12	12

#### Nalgene Replacement Closures, high-density polyethylene

Cat. No.	Description	No. per Pack	No. per Case
712151-0083	83B Replacement Cap w/ TPE Gasket for Large Nalgene Bottles or Carboys	2	2

#### Nalgene Replacement Closure with Strap, white polypropylene

Cat. No.	Description	No. per Pack	No. per Case
712240-1053	53B Replacement Closure and Strap for Jerrican	10	10





## ► Thermo Scientific Nalgene Bioprocess Bag Management System and Accessories

polycarbonate



**Nalgene™ Bioprocess Bag Management Systems provides a rigid puncture-resistant protective barrier for pre-filled bioprocess bags during use and shipment.**

Systems are easy to set up and nestable/stackable for space-saving storage. The contoured inner design isolates and stabilizes bag and tubing during transport.

### details

- System includes generous sized tubing compartment to manage and protect tubing during storage or transport
- Molded of durable, impact resistant polycarbonate that withstands freezing and autoclave temperatures
- Systems available in transparent PC and opaque black PC for protection of light-sensitive materials
- Each set contains: (2) PC shell bodies, (4) release clips, (5) button plugs and product instructions

**Compliance:** Complies with ISTA 2A standards with an appropriate cold chain supply shipper.

### Nalgene Bioprocess Bag Management System and Accessories

Cat. No.	Description	Capacity, L	Shell Color	O.D. x W x H, cm	No. per Case
15000-0050	Clear	5	Clear	55 x 36 x 19	4 sets
15000-0051	Opaque	5	Opaque	55 x 36 x 19	4 sets
15000-0200	Clear	20	Clear	82 x 45 x 22	2 sets
15000-0201	Opaque	20	Opaque	82 x 45 x 22	2 sets
<b>Accessories</b>					
15000-0003	Void Fill	----	----	----	24
15000-0004	Release Clips	----	----	----	24
15000-0005	Button Plugs	----	----	----	50



## ► Thermo Scientific Nunc EasyFill Cell Factory Systems polystyrene



**Nunc™ EasyFill™ Cell Factory™ system is a single-use, “out-of-the-box” system with a large, vented screw closure and versatile port design for pouring and aseptic filling.**

To get started, simply pour the media directly into the EasyFill Cell Factory system's large opening. The linear, multi-layer format promotes easy scalability and is ideal for both research and commercial-scale cell culture applications.

### details

- Save valuable space – each EasyFill Cell Factory 10 holds the equivalent of 36-T175 flasks
- Enhance productivity with 5X faster fill and empty times vs. T175 flasks
- Achieve fast start-up – no accessories required with EasyFill Cell Factory systems
- Certified Nunclon Delta surface ensures consistent growth layer to layer, lot to lot

### Nunc EasyFill Cell Factory Systems

Cat. No.	Type	No. of Layers	Culture Area, cm <sup>2</sup>	No. per Pack	No. per Case
140000	EasyFill Cell Factory System	1	632	1	6
140250	EasyFill Cell Factory System	2	1264	1	6
140360	EasyFill Cell Factory System	4	2528	1	4
140400	EasyFill Cell Factory System	10	6320	1	2
140410	EasyFill Cell Factory System	10	6320	1	6
140440	EasyFill Cell Factory System	40	25,280	1	2



## ► Thermo Scientific Nunc EasyFill Cell Factory Accessories



**Nunc™ EasyFill™ Cell Factory™ Accessories support the use of aseptic methods for fluid handling related to filling, inoculation, feeding and harvesting of the EasyFill Cell Factory system.**

It is now easier than ever to create a Nunc EasyFill Cell Factory system for your specific application.

### details

- Plug a media bag or tubing set into any Cell Factory system making connections easy
- All accessories are gamma irradiated and individually wrapped eliminating the need for in-house cleaning processes and validations
- Prevent build up of back pressure during filling application with vent filter assemblies



*EasyFill adaptor closures*



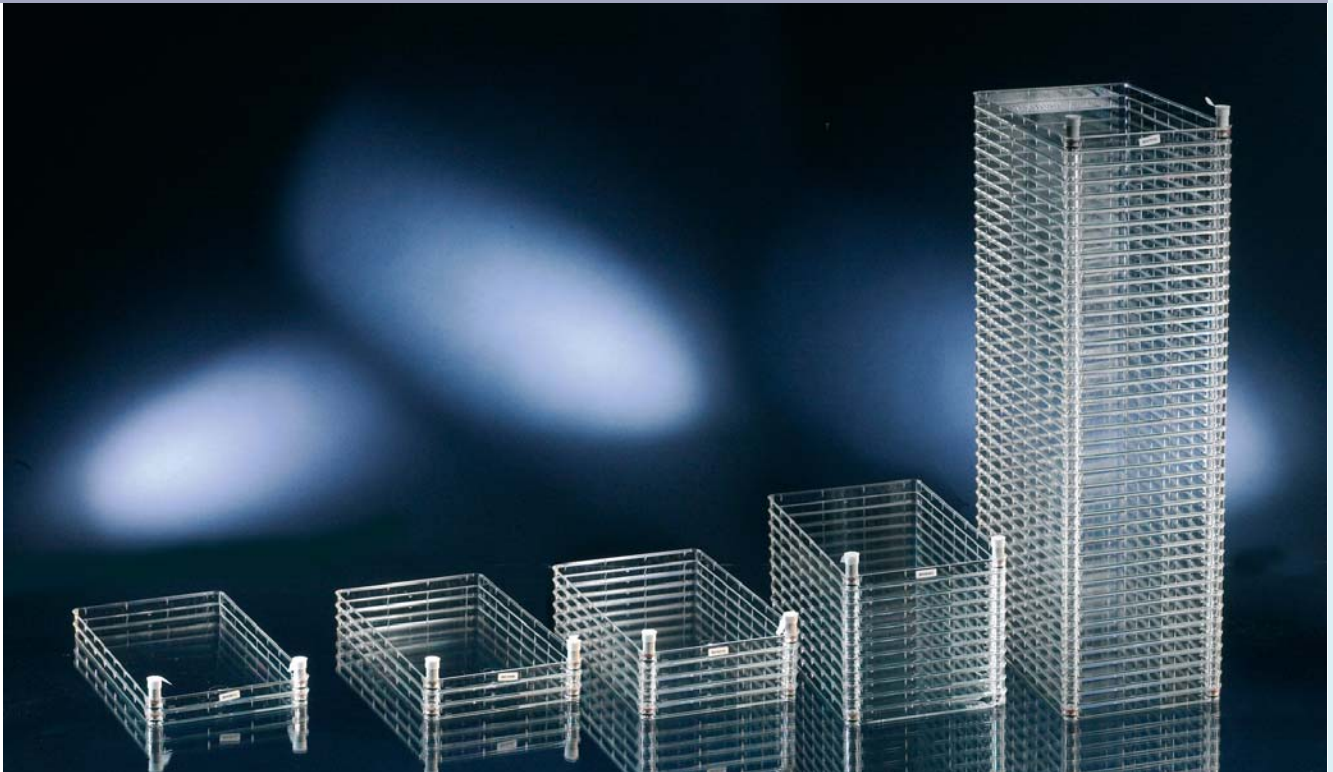
*EasyFill filter assemblies*



*EasyFill vent caps*

### Nunc EasyFill Cell Factory Accessories

Cat. No.	Description	Material	No. per Pack	No. per Case
140065	EasyFill Cell Factory Adaptor closure with 1/2 in. Barb, Irradiated	High-density polyethylene	1	12
140085	EasyFill Cell Factory Closure with 1/4 in. Barb, Irradiated	High-density polyethylene	1	12
140086	EasyFill Cell Factory Closure with 3/8 in. Barb, Irradiated	High-density polyethylene	1	12
140067	EasyFill Cell Factory Filter Assembly, 37 mm, 1.0 µm, Irradiated	High-density polyethylene	1	2
140080	EasyFill Cell Factory Filter Assembly, 200 cm², 0.22 µm, Irradiated	High-density polyethylene	1	2
146008	Replacement Vent Cap; Sterile	High-density polyethylene	1	10



## ► Thermo Scientific Nunc Cell Factory Systems polystyrene

**The original Nunc™ Cell Factory™ system is the proven solution for large-scale production of cells, vaccines and therapeutic proteins – with the same growth kinetics as laboratory-scale cell culture products.**

Available in 1-, 2-, 4-, 10- and 40-tray versions, the ports of the original Cell Factory system make it easy to customize and create a closed system with the use of custom tubing assemblies that facilitate venting, filling and harvesting.

### details

- Ideal for adherent cells
- Boost production efficiency with more surface area in a small footprint
- Reduce contamination risks with a closed system
- Experience faster results and lot-to-lot consistency
- Certified Nunclon™ Delta™ surface ensures consistent growth, layer to layer

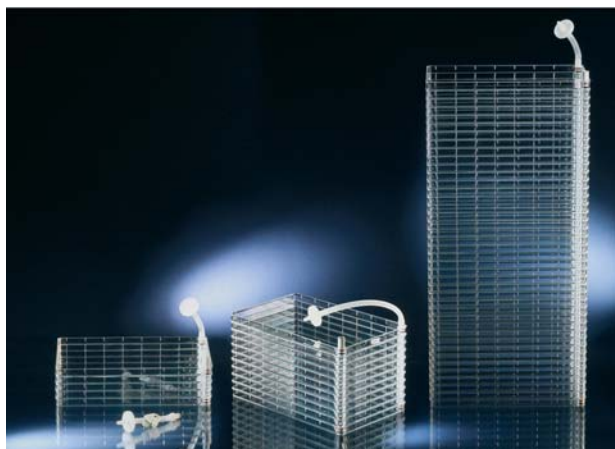
### Nunc Cell Factory Systems

Cat. No.	Type	No. of Layers	Culture Area, cm <sup>2</sup>	No. per Pack	No. per Case
165250	Original Cell Factory System	1	632	1	8
167695	Original Cell Factory System	2	1264	1	6
140004	Original Cell Factory System	4	2528	1	10
164327	Original Cell Factory System	10	6320	1	2
170009	Original Cell Factory System	10	6320	1	6
139446	Original Cell Factory System	40	25,280	1	2





## ► Thermo Scientific Nunc Cell Factory System with Active Gassing polystyrene



**Nunc™ Cell Factory™ System with Active Gassing ensures a controlled, contamination-free atmosphere in each culture tray by equally distributing the user-specified gas mixture.**

The system creates an ideal environment for culturing oxygen-consuming and pH sensitive cells. Available in 4-, 10- and 40-tray models.

### details

- Achieve greater yields with controlled cell culture environments
- Optimize production capacity without changing cell culture platforms
- Certified Nunclon Delta surface ensures consistent growth layer to layer, lot to lot

**Nunc Cell Factory System with Active Gassing**

Cat. No.	Type	No. of Layers	Culture Area, cm <sup>2</sup>	No. per Pack	No. per Case
173240	Cell Factory System with Active Gassing	4	2528	1	10
173239	Cell Factory System with Active Gassing	10	6320	1	6
173238	Cell Factory System with Active Gassing	40	25,280	1	2



## ► Thermo Scientific Nunc Cell Factory Accessories



Filter adapter cap and 1.0 µm airvent filter

**Nunc™ Cell Factory™ Accessories supports the use of aseptic methods for fluid handling relating to filling, inoculation, feeding and harvesting of the Cell Factory system.**

These accessories enable the further development of applications requiring a more closed cell culture system, reducing the number of open interventions.

### details

- Plug a media bag or tubing set to any Cell Factory system for enhanced aseptic connectivity for filling and harvesting
- Prevent build up of back pressure during filling application
- Venting options provide additional air venting when filling and harvesting by gravity or with a peristaltic pump



Airvent filters with HDPE connector



HDPE connector



Blue cover caps



Filling tubing set

### Nunc Cell Factory Accessories

Cat. No.	Description	No. per Pack	No. per Case
173248	Airvent filter, 1.0 µm with HDPE connector, Sterile	1	2
179553	Airvent filter, 1.0 µm, Sterile	1	10
173249	Airvent filter, 0.22 µm, with HDPE connector, Sterile	1	2
167525	Filter Adaptor Cap; Sterile	1	20
170615	Blue Cover Cap; Sterile	2	40
140099	PC connector	10	10
171840	HDPE connector	10	10
173250	Teflon® connector, Autoclavable	2	2
140120	Cell Factory Filling Tubing Set, irradiated	1	2

*Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corp.*



## ► Thermo Scientific Nunc Cell Factory Start-Up Kit



**The Nunc™ Cell Factory™ Start-Up Kit supports the use of aseptic methods for fluid handling related to filling, inoculation, feeding and harvesting of the Cell Factory system.**

These accessories enable the further development of applications requiring a more closed cell culture system, reducing the number of open interventions.

### details

- Features several items routinely used in the setup of a cell factory, including HDPE connector, two cover caps, two blue sealing caps, No. 4210 bacterial air vent filter, tubing and clamp
- All items are sterile

#### Nunc Cell Factory Start-Up Kit

Cat. No.	Description
170769	Start-up kit for use with Nunc Cell Factory Systems

## ► Thermo Scientific Nunc Cell Factory Hand Manipulator stainless steel



**Nunc™ Cell Factory™ Hand Manipulators are designed for the safe and efficient handling of Cell Factory 10 and 40 layer systems.**

The Cell Factory Hand Manipulator is mobile and includes a foot brake for safe placement. The Cell Factory 10 Hand Manipulator is compact and ideal for use within in a biosafety cabinet.

### details

- Constructed of stainless steel, designed for use in clean room environments

#### Nunc Cell Factory Hand Manipulator

Cat. No.	Description
176953	Cell Factory 40 Hand Manipulator
132752	Cell Factory 10 Hand Manipulator



## ► Thermo Scientific Nunc Automatic Cell Factory Manipulator (ACFM) stainless steel

**Nunc™ ACFM automates the filling and harvesting of four Nunc Cell Factory™ 40 or 12 Nunc Cell Factory 10 systems.**

### details

- Constructed of AISI 316 8 mm stainless steel and designed for use in clean room environments
- For large scale cell culture and production of vaccines, cell therapeutics or other biological products
- Available with or without safety light curtain

**Related products:** Side Loading Rack with Cart for Cell Factory 40 System (Cat. No. 140503), Side Loading Rack with Cart for Cell Factory 10 Systems (Cat. No. 140504).

**Compliance:** The ACFM complies with safety requirements of the following standards and guidelines: EC Machinery Directive 2006/42/EC (Cat. No. 120351 only) and EC Machinery Directive 2004/108/EC.

### Nunc Automatic Cell Factory Manipulator (ACFM)

Cat. No.	Description	Electrical Requirements
120351	ACFM GEN 10 w/ Safety Light Curtain and Membrane Control Panel	3/N/PE, 400V 50Hz
120352	ACFM GEN 10 w/ Membrane Control Panel	3/N/PE, 230V 60Hz
120353	ACFM GEN 10 w/ Membrane Control Panel	3/N/PE, 208V 60Hz
120354	ACFM GEN 10 w/ Membrane Control Panel	3/N/PE, 480V 60Hz
<b>Accessories</b>		
132847	Retrofit Safety light curtain for ACFM Gen 10	



## ► Thermo Scientific Nunc Cell Factory Shaker System

stainless steel



The Nunc™ Cell Factory™ Shaker System offers an automated solution for the detachment of cells from Nunc Cell Factory Systems.

### details

- Eliminates traditional need for manual methods for cell detachment, such as shaking and pounding
- Performs a continuous horizontal accelerated and decelerated movement to the Cell Factory System
- Adjustable frequency of the shaking
- Designed to easily load and unload Cell Factory carts

**Ordering Information:** For use with Nunc Cell Factory Side Loading Rack with Cart, please order the Retrofit Clamping Kit (Cat. No. 120289).

**Related products:** Side Loading Rack with Cart for Cell Factory 40 System (Cat. No. 140503), Side Loading Rack with Cart for Cell Factory 10 Systems (Cat. No. 140504), Retrofit Clamping Kit for Racks for use with shaker (Cat. No. 120289).

**Compliance:** The Cell Factory Shaker complies with the safety requirements of the following standards and guidelines: Machinery Directive 98/37/EC, Low Voltage Directive 2006/96/EC, EMC Directive 2004/108/EC.

### Nunc Cell Factory Shaker System

Cat. No.	Description	Electrical Requirements
132849	Cell Factory Shaker GEN 2	208.240V, 50/60Hz, Single Phase
120289	Retro Clamping Kit for Racks for use with Shaker	



## ► Thermo Scientific Nunc Cell Factory Incubators

stainless steel



**Nunc™ incubator is a mobile solution for the incubation of Nunc Cell Factory™ Systems.**

### details

- Accommodates four racks of Cell Factory 40 or Cell Factory 10 Systems
- Incubator floor height accommodates the easy loading and unloading of Cell Factory carts
- Available with and without CO<sub>2</sub> control
- Maintains temperature 5°C above ambient to 50°C
- Maintains CO<sub>2</sub> 0-20% +/- 0.5% (Cat. No. 120300)
- Equipped with warning and alarm systems

**Related products:** Side Loading Rack with Cart for Cell Factory 40 System (Cat. No. 140503), Side Loading Rack with Cart for Cell Factory 10 Systems (Cat. No. 140504).

**Compliance:** Our incubators are manufactured in accordance with CE guidelines, and meet the requirements of IEC 6110.

### Nunc Cell Factory Incubators

Cat. No.	Description	Electrical Requirements
120100	Cell Factory Incubator, Gen 5	208.240V, 50/60Hz, Single Phase
120300	Cell Factory Incubator with CO <sub>2</sub> control, Gen 5	208.240V, 50/60Hz, Single Phase

## ► Thermo Scientific Nunc Cell Factory Racks and Carts

stainless steel



**Nunc™ Cell Factory™ Rack and Carts are designed to perfectly integrate with all Nunc Cell Factory equipment.**

### details

- Constructed of AISI 316 stainless steel
- Designed for use in clean room environments
- Side loading design for easy loading and unloading
- Available for use with Cell Factory 40 and Cell Factory 10 Systems
- Holds four Cell Factory 40- or 12-Cell Factory 10 System

### Nunc Cell Factory Racks and Carts

Cat. No.	Description
140503	Side Loading Rack with Cart for Cell Factory 40
140504	Side Loading Rack with Cart for Cell Factory 10
120289	Retro Clamping Kit for Racks for use with Shaker





## ► Thermo Scientific Nunc TufRol Roller Bottles

polystyrene, high-density polyethylene closures



**Nunc™ TufRol™ PS Roller Bottles provide reliability and reproducibility necessary for laboratory and industrial scale applications, including vaccines, cell culture expansion and the production of other biologics.**

Minimize validation of cell culture scale-up processes from plates to flasks to roller bottles by choosing a family of products that utilize polystyrene materials.

### details

- One-piece seamless design reduces possibility of leaking through a seam
- Shallow and deep indents at bottom make the roller bottle excellent for both manual and automated handling
- Proprietary manufacturing process gives greater impact resistance
- Vertical pleat orientation facilitates emptying and reduces retention of product



### Nunc TufRol Roller Bottles

Cat. No.	Description	Surface Area, cm <sup>2</sup>	No. per Pack	No. per Case
181702	Roller Bottle, smooth surface, vented	850	2	20
182702	Roller Bottle, smooth surface	850	2	20
182720	Roller Bottle, smooth surface	850	20	20
182744	Roller Bottle, smooth surface	850	20	20, Double-bagged
183302	EZ Roller Bottle, smooth surface, shallow indent, vented	850	2	20
183902	EZ Roller Bottle, smooth surface, deep indent, vented	850	2	20
184302	EZ Roller Bottle, smooth surface, shallow indent	850	2	20
184344	EZ Roller Bottle, smooth surface, shallow indent	850	20	20, Double-bagged
184902	EZ Roller Bottle, smooth surface, deep indent	850	2	20, Double-bagged
184920	EZ Roller Bottle, smooth surface, deep indent	850	20	20
184944	EZ Roller Bottle, smooth surface, deep indent	850	20	20, Double-bagged
141744	Roller Bottle, pleated surface, vented	1450	20	20, Double-bagged
142720	Roller Bottle, pleated surface	1450	20	20
142744	Roller Bottle, pleated surface	1450	20	20, Double-bagged



### Replacement Closures for Nunc TufRol Roller Bottles

Cat. No.	Description	Material	No. per Pack	No. per Case
111250	Vented Closures	HDPE	250	500
112250	Easy on/off Closures	HDPE	250	500



## ► Thermo Scientific Nunc InVitro Roller Bottles

polyethylene terephthalate copolyester, high-density polyethylene closures

**Nunc™ InVitro™ PETG Roller Bottles increase cell expansion and product yield without the need to purchase additional production equipment or increase labor.** For laboratory and industrial scale applications including vaccines, cell culture expansion and the production of other biologics.

### details

- Molded of durable, virtually unbreakable PETG, offering the safest roller bottle solution on the market today
- Can be frozen down to -40°C; supports freeze/thaw cell release methods, reducing reliance on trypsin
- Wide range of surface areas from 1050 cm<sup>2</sup> to 4200 cm<sup>2</sup>, providing solutions for all scales
- Quick-action ergonomic closure reduces wrist strain and increases productivity
- Lot number on every bottle for full traceability

**Nunc InVitro Roller Bottles**

Cat. No.	Description	Surface Area, cm <sup>2</sup>	No. per Pack	No. per Case
1060-05	1.2X Roller Bottle, smooth surface	1050	5	20
1060-20	1.2X Roller Bottle, smooth surface	1050	20	20
1060-50	1.2X Roller Bottle, smooth surface, Poly-D-Lysine coated	1050	20	20
1060-85	1.2X Roller Bottle, smooth surface, vented	1050	5	20
1760-20	2X Roller Bottle, pleated surface	1700	20	20
1860-22	1XL Roller Bottle, smooth surface	1800	22	22
2160-05	2.5X Roller Bottle, pleated surface	2100	5	20
2160-20	2.5X Roller Bottle, pleated surface	2100	20	20
4260-22	5X Roller Bottle, pleated surface	4200	22	22

**Replacement Closures for Nunc InVitro Roller Bottles**

Cat. No.	Description	Material	No. per Pack	No. per Case
3080-01	Vented Quick Action Replacement Closures, 48 mm	HDPE	1	300

**Thermo Scientific Products –**  
*meeting the challenges of science and industry*

# shakers

**Reproducible results,  
each and every time.**

Thermo Scientific MaxQ shakers ensure your effectiveness and productivity with a wide range of analog and digital shaker offerings. With a product portfolio that includes incubated and refrigerated offerings, available as stackable benchtop and floor model units, we make it easy to find the right shaker solution for your laboratory. Features like our triple eccentric drive mechanisms provide continuous 24-hour operation, and allow you to shake large and uneven loads smoothly and uniformly.

MaxQ shakers are a perfect fit to a broad range of applications, from general mixing, cell culture and solubility studies to bacterial suspensions, staining/destaining and hybridization.



For more product information, go to:  
**[www.thermoscientific.com/shakers](http://www.thermoscientific.com/shakers)**

## ► Thermo Scientific Nalgene Sterile Single Use Erlenmeyer Flasks

polyethylene terephthalate copolyester, white high-density polyethylene closures



**Nalgene™ PETG Flasks are ideal for suspension cell culture, media preparation, mixing and storage.**

The sterile, single-use flasks are made of light, break resistant, crystal clear PETG. All sizes are available vented or non-vented and with plain bottom or with baffled bottom for use on the bench top or shaker table.

### details

- Sterile and single use: reduce contamination risk
- Robust and break resistant: increase personal safety
- Collapses when autoclaved: reduce bio hazardous waste
- Graduated for quick volume assessment
- Supported by extensive validation documentation

### Nalgene Sterile Single Use Erlenmeyer Flasks with Baffled Bottom

Cat. No.	Working Capacity, mL	Neck Finish, mm	Bottom Style	No. per Pack	No. per Case
<b>Vented Closure</b>					
4115-0125	125	38-430	Plain	1	24
4115-0250	250	38-430	Plain	1	12
4115-0500	500	45-430	Plain	1	12
4115-1000	1000	45-430	Plain	1	6
4115-2000	2000	45-430	Plain	1	4
4115-2800	2800	70	Plain	1	4
4116-0125	125	38-430	Baffled	1	24
4116-0250	250	38-430	Baffled	1	12
4116-0500	500	45-430	Baffled	1	12
4116-1000	1000	45-430	Baffled	1	6
4116-2000	2000	45-430	Baffled	1	4
4116-2800	2800	70	Baffled	1	4
<b>Solid Closure</b>					
4112-0125	125	38-430	Plain	1	24
4112-0250	250	38-430	Plain	1	12
4112-0500	500	45-430	Plain	1	12
4112-1000	1000	45-430	Plain	1	6
4112-2000	2000	45-430	Plain	1	4
4112-2800	2800	70	Plain	1	4
4113-0125	125	38-430	Baffled	1	24
4113-0250	250	38-430	Baffled	1	12
4113-0500	500	45-430	Baffled	1	12
4113-1000	1000	45-430	Baffled	1	6
4113-2000	2000	45-430	Baffled	1	4
4113-2800	2800	70	Baffled	1	4





## ► Thermo Scientific Nalgene Vented Closures for Sterile Single Use Erlenmeyer Flasks

high-density polyethylene



**Nalgene™ Vented Closures for Sterile Single Use Erlenmeyer Flasks provide sterile gas exchange for shaker and suspension cell cultures.**

### details

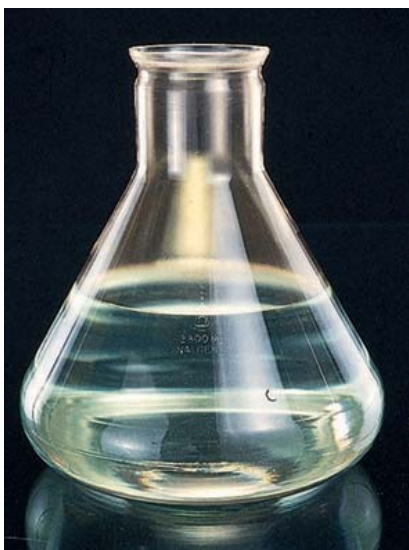
- Blue HDPE with hydrophobic 0.2 µm PTFE membrane
- Permits gas exchange without unscrewing closure
- Membrane is heat welded into place for effective sealing
- Sterile

### Nalgene Vented Closures for Sterile Single Use Erlenmeyer Flasks

Cat. No.	Description	No. per Pack	No. per Case
4114-0038	Vent Closures for 125 mL and 250 mL Erlenmeyer Flasks	1	12
4114-0045	Vent Closures for 500 mL, 1 L and 2 L Erlenmeyer Flasks	1	12

## ► Thermo Scientific Nalgene Fernbach Culture Flask

polycarbonate



**Nalgene™ Fernbach Culture Flask is constructed of durable, transparent polycarbonate.**

### details

- Break-resistant, transparent PC; safer than glass alternatives
- Fernbach design supports better aeration for the culturing of microorganisms
- For leakproof seal, use No. 12 rubber stopper

### Nalgene Fernbach Culture Flask

Cat. No.	Working Capacity, L	No. per Pack	No. per Case
4105-2800	2.8	1	4



## ► Thermo Scientific Nalgene Magnetic Culture Vessel

polycarbonate, polypropylene closures, Teflon® TFE stir bar, polypropylene/TFE stirring assembly



**Nalgene™ Magnetic Culture Vessels are designed for efficient top-to-bottom mixing at low speeds.**

Lightweight and break resistant, these vessels are excellent for use on magnetic stir plates. Two magnetic stir bars are included – small for bacteria and large for mammalian cells.

### details

- Includes two ports for easy access to cultures
- Magnetic stir bar keeps cells suspended at low stirring speeds, minimizing shear
- Adjustable impeller height supports process modifications
- Molded of lightweight and durable PC; safer than glass alternatives

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corp.

### Nalgene Magnetic Culture Vessel

Cat. No.	Working Capacity, L	No. of Ports	No. per Case
2605-0001	1	2 x 38-430	1

## ► Thermo Scientific Nalgene Culture Vessel with Ports

polycarbonate, white polypropylene closures



**Nalgene™ Culture Vessels feature four ports supporting easy access to your suspension cultures. Economical, lightweight and break-resistant.**

### details

- Molded of transparent PC for easy viewing of your cultures
- Graduated in 0.5 L increments from 3 to 12 L
- For use with overhead drive mixers and lower assemblies for top to bottom mixing
- Port accessories are available; ports accept any Nalgene 38-430 size closure
- Non-cytotoxic, autoclavable and USP Class VI compliant

### Nalgene Culture Vessel with Ports

Cat. No.	Working Capacity, L	No. of Ports	No. per Case
2600-0012	12	4 x 38-430	1



## ► Thermo Scientific Nalgene Probe Adapter Closure

polypropylene, silicone gasket



**Nalgene™ Probe Adapter Closures allow for insertion of 7 to 14 mm diameter probes into Thermo Scientific Nalgene Culture Vessels and Bottles with 38-430 neck finishes.**

Provides controlled access to the interior of culture vessels.

### details

- Molded of autoclavable PP; ready for in-house sterilization
- Includes a silicone gasket to ensure a leakproof seal
- Allows insertion of 7 to 14 mm diameter probes into 1 and 12 L culture vessels
- Ideal for use with any Nalgene bottle or culture vessel with a 38-430 neck finish

#### Nalgene Probe Adapter Closure

Cat. No.	Description	No. per Case
2145 0384	38-430 Probe Adaptor Closure	2

## ► Thermo Scientific Nalgene Closures with Barbed Bulkhead Fittings

polypropylene



**Nalgene™ Closures with Barbed Bulkhead Fittings support the integration of tubing sets to Nalgene culture vessels.**

Promotes the customization of Nalgene culture vessels for aseptic transfer of liquids.

### details

- Size 38 mm-430 closures are pre-drilled allowing for easy, safe in-house assembly
- Barbed bulkhead fittings also sold separately (Cat. Nos. 6149-0001 and 6149-0002)
- Molded of autoclavable PP, ready for in-house sterilization

#### Nalgene Closures with Barbed Bulkhead Fittings

Cat. No.	Description	No. per Case
DS2167-0001	38-430 closure with 1/2 in. I.D. barbed fitting	4
DS2167-0002	38-430 closure with 1/4 in. I.D. barbed fitting	4

## ► Thermo Scientific Nalgene Autoclavable Septum Closures

thermoplastic elastomer



**Nalgene™ Autoclavable Septum Closures allow aseptic injection of reagent or sample withdrawal without compromising sterility or integrity of contents.**

Suitable for use with any bottle or container with 38-430 neck, including Nalgene culture vessels.

### details

- Use with 18-gauge or smaller needles for aseptic injection of reagent or sample withdrawal without compromising sterility or integrity of contents
- Autoclavable

**Alerts:** For laboratory use only; not for in-vitro diagnosis or parenterals.

### Nalgene Autoclavable Septum Closures

Cat. No.	Description	No. per Case
DS2168-0384	38-430 Autoclavable Septum Closures	12

## ► Thermo Scientific Nunc 2D MicroHex Microcarriers

polystyrene



**Nunc™ 2D MicroHex™ are sterile, ready-to-use, solid, non-swelling, non-porous and non-absorbing microcarriers for adherent cell culture.**

Sterile, ready-to-use, solid, non-swelling, non-porous and non-absorbing microcarriers for adherent cell culture.

### details

- Shape and low density (1.05 g/cm<sup>3</sup>) of the particles allows them to be kept in suspension at low stirring speeds
- Features certified Nunclon™ Delta™ surface, supporting scale up from Nunc cell culture dishes and flasks
- Very low displacement volume/unit surface area
- Gamma sterilized and ready for use – no conditioning required

### Nunc 2D MicroHex Microcarriers

Cat. No.	Grams per Bottle	Culture Area, cm <sup>2</sup> (per Bottle)	No. Bottles per Case
139102	2	1500	10
139104	10	7500	5
139106	20	15,000	5
139108	100	75,000	2

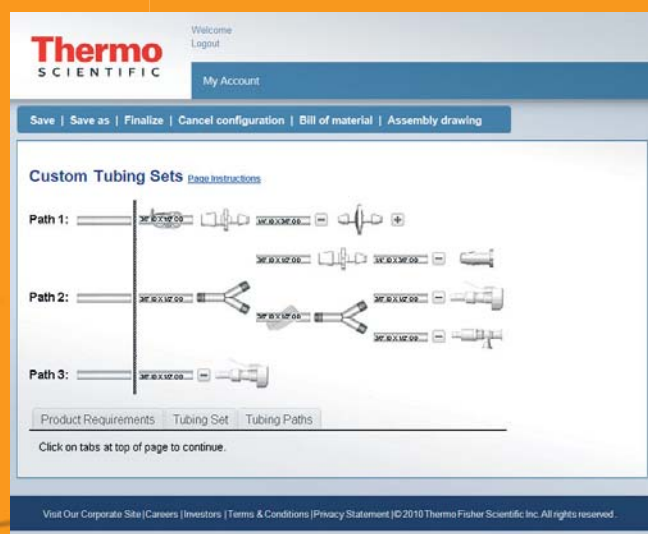
# custom online tubing set configurator

See how easy it is to build a customized tubing solution. The Thermo Scientific Custom Online Tubing Set Configurator uses an intelligent, rules-based engine for a “no-fail” approach, ensuring that even highly complex designs can be manufactured and delivered in a timely manner. Watch your tubing set grow with each choice within the new interactive design window.

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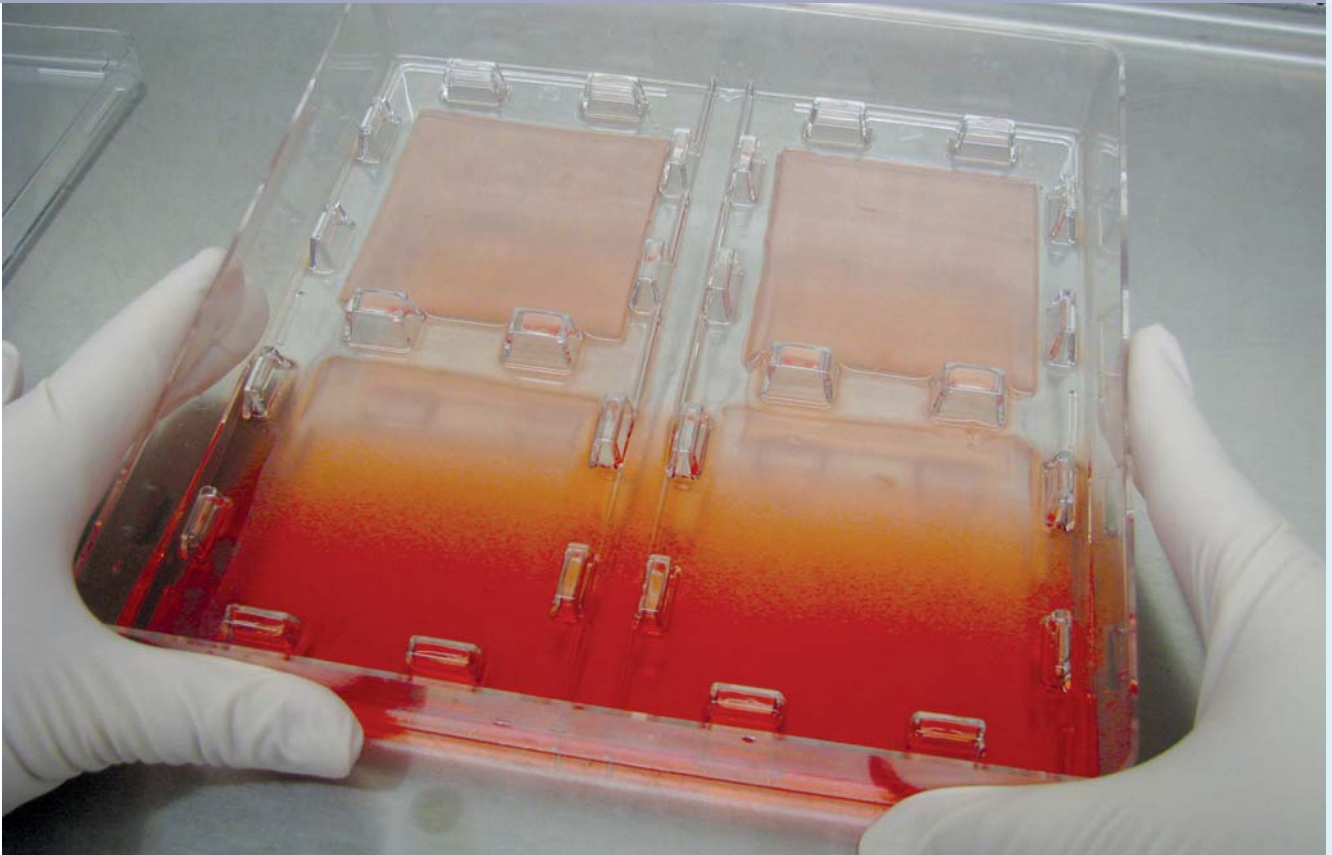
Use the Custom Online Tubing Set Configurator to:

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[www.thermoscientific.com/tubingconfigurator](http://www.thermoscientific.com/tubingconfigurator)





## ► Thermo Scientific Nunc Skin Graft Cell Culture Dish

polystyrene

**The Nunc™ Skin Graft Cell Culture Dish is specially designed to support growth of skin and other grafts.**

### details

- Four chambers in one sterile ( $10^{-6}$  SAL) dish increase throughput and efficiency of skin graft production
- Ribbed 3 x 3 in. chambers separate and stabilize grafts during production, preventing them from growing into or on top of each other
- Filling channel between chambers allows media to be added without disrupting grafts
- Footprint permits automated initial cell seeding onto sponges – reducing labor costs and risk of contamination while increasing consistency

### Nunc Skin Graft Cell Culture Dish

Cat. No.	Description	No. per Pack	No. per Case
149001	Skin Graft Dish, four 3 x 3 in. growth chambers	2	8





## ► Thermo Scientific Nalgene Top Works Fluid Transfer Systems



**Nalgene™ Top Works™ Fluid Transfer Systems are aseptic handling solutions for pharmaceutical, biotechnology and laboratory liquid transfer applications.**

Customize Thermo Scientific Nalgene bottles and carboys with closures, including platinum cured silicone stopper inserts and tubing. Available with various ports, tubing lengths and closure sizes.

### details

- Closures are specifically designed to mate with most Nalgene bottles and carboys
- Leakproof systems for secure, aseptic handing of high-valued products compared to pouring
- Includes long tubing lengths, both inside and outside the container to support the integration to most Nalgene bottles and carboys
- Ready to accept additional fluid transfer components such as aseptic connectors and air vent filters

**Ordering Information:** One system per case.

**Compliance:** USP Class VI.

### Nalgene Top Works Fluid Transfer Systems

Cat. No.	Closure Size, mm	No. of Ports	Port I.D. Size, in. (mm)	No. per Case
2135-3803	38-430	3	1-1/4 (6.35), 2-1/8 (3.18)	1
2135-5300	53B	None (solid insert)	—	1
2135-5302	53B	2	2-1/4 (6.35)	1
2135-5303	53B	3	1-1/8 (3.18), 2-1/4 (6.35)	1
2135-8300	83B	None (solid insert)	—	1
2135-8302	83B	2	1-1/4 (6.35)	1
2135-8303	83B	3	1-3/8 (9.52), 2-1/4 (6.35)	1
2132-1003†	GL45 PSF	3	1-1/8 (3.18), 2-1/4 (6.35)	1

† GL45 closure system for Schott™, Corning™ and Wheaton™ media bottles

## ► Thermo Scientific Nalgene Platinum-Cured Silicone Tubing



**Nalgene™ Platinum-Cured Silicone Tubing is flexible, durable, translucent, high purity tubing designed for a variety of pump and transfer applications, including pharmaceutical, laboratory, bioprocess manufacturing and food and beverage.**

### details

- Tasteless, odorless, non-cytotoxic, non-pyrogenic and non-hemolytic
- Contains no phthalate plasticizers or peroxides that can leach out into transported fluid
- Low-binding surface minimizes absorption of proteins and food products
- Autoclavable; also can be sterilized by gamma radiation, EtO and chemical procedures
- Durometer hardness: Shore A, 50

**Ordering Information:** Double-bagged in case of 50 ft. (15.2 m).

**Compliance:** Meets FDA, USDA, U.S. Pharmacopeia Class VI, 24th Edition requirements for plastic materials; and 3A sanitary standards.

*Notes: Not intended for invasive use.*

### Nalgene Platinum-Cured Silicone Tubing

Cat. No.	I.D. x O.D. x Wall, in. (mm)	Max. Press. psig at 73°F; 23°C	Max. Press. psig at 320°F; 160°C	Length per Case, ft. (m)
8060-0020	1/16 x 1/8 x 1/32 (1.59 x 3.18 x 0.79)	15	9	50 (15.2)
8060-0030	1/8 x 1/4 x 1/16 (1.59 x 3.18 x 0.79)	21	12	50 (15.2)
8060-0040	3/16 x 5/16 x 1/16 (4.76 x 7.94 x 0.79)	13	8	50 (15.2)
8060-0050	3/16 x 3/8 x 3/32 (4.76 x 9.53 x 2.38)	14	8	50 (15.2)
8060-0060	1/4 x 3/8 x 1/16 (6.35 x 9.53 x 0.79)	12	7	50 (15.2)
8060-0070	1/4 x 7/16 x 3/32 (6.35 x 11.11 x 2.38)	17	10	50 (15.2)
8060-0080	1/4 x 1/2 x 1/8 (6.35 x 12.7 x 3.18)	17	10	50 (15.2)
8060-0100	5/16 x 1/2 x 3/32 (7.94 x 12.7 x 2.38)	16	10	50 (15.2)
8060-0120	3/8 x 1/2 x 1/16 (9.53 x 12.7 x 0.79)	11	7	50 (15.2)
8060-0130	3/8 x 9/16 x 3/32 (9.53 x 14.29 x 2.38)	12	7	50 (15.2)
8060-0140	3/8 x 5/8 x 1/8 (9.53 x 15.88 x 3.18)	14	8	50 (15.2)
8060-0190	1/2 x 11/16 x 3/32 (12.7 x 17.46 x 2.38)	10	6	50 (15.2)
8060-0200	1/2 x 3/4 x 1/8 (12.7 x 19.05 x 3.18)	12	7	50 (15.2)
8060-0260	5/8 x 7/8 x 1/8 (15.88 x 22.23 x 3.18)	12	7	50 (15.2)
8060-0310	3/4 x 1 x 1/8 (19.05 x 25.4 x 3.18)	9	5	50 (15.2)



## ► Thermo Scientific Nalgene Platinum-Cured Silicone Tubing for Peristaltic Pumps



**Nalgene™ Platinum-Cured Silicone Tubing for Peristaltic Pumps** is flexible, durable, translucent high-purity tubing designed for a variety of pump and transfer applications including pharmaceutical, laboratory, bioprocess manufacturing and food and beverage.

### details

- Tasteless, odorless, non-cytotoxic, non-pyrogenic and non-hemolytic
- Contains no phthalate plasticizers or peroxides that can leach out into transported fluid
- Low-binding surface minimizes absorption of proteins and food products
- Autoclavable; also can be sterilized by gamma radiation, EtO and chemical procedures
- Durometer hardness: Shore A, 50

**Ordering Information:** Double-bagged in case of 25 ft. (7.6 m).

**Compliance:** Meets FDA, USDA, U.S. Pharmacopeia Class VI, 24th Edition; and 3A sanitary standards.

*Notes: Not intended for invasive use.*

### Nalgene Platinum-Cured Silicone Tubing for Peristaltic Pumps

Cat. No.	Pump Tube Size	Hose Barb I.D., in. (mm)	Length per Case, ft (m)
8060-3015	No. 15	3/16 (4.76)	25 (7.6)
8060-3016	No. 16	1/8 (3.18)	25 (7.6)
8060-3017	No. 17	1/4 (6.35)	25 (7.6)
8060-3018	No. 18	5/16 (7.94)	25 (7.6)
8060-3024	No. 24	1/4 (6.35)	25 (7.6)
8060-3025	No. 25	3/16 (4.76)	25 (7.6)
8060-3173	No. 73	3/8 (9.53)	25 (7.6)
8060-3182	No. 82	1/2 (12.7)	25 (7.6)

## ► Thermo Scientific Nalgene Braided Platinum-Cured Silicone Tubing



**Nalgene™ Braided Platinum-Cured Silicone Tubing is durable, high-purity tubing designed for a variety of pump and transfer applications including pharmaceutical, laboratory, bioprocess manufacturing and food and beverage applications.**

Manufactured with interwoven polyester braid for added safety, pressure and kink resistance.

### details

- Contains no phthalate plasticizers or peroxides that can leach out into transported fluid
- Low-binding surfaces minimizes absorption of proteins and food products
- Tasteless, odorless, non-cytotoxic, non-pyrogenic, and non-hemolytic
- Autoclavable; also can be sterilized by gamma radiation, ETO and chemical procedures
- Durometer hardness: Shore A, 65

**Ordering Information:** Double-bagged in 25 ft. (7.6 m) cases.

**Compliance:** Meets FDA, USDA, U.S. Pharmacopeia Class VI, 24th Edition requirements for plastic materials; and 3A sanitary standards.

### Nalgene 65 Braided Platinum-Cured Silicone Tubing

Cat. No.	I.D. x O.D. x Wall, in. (mm)	Max. Press. psig	Max. Press. psig	Length per Case, ft. (m)
		at 73°F; 23°C	at 320°F; 160°C	
8061-3070	1/4 x 9/16 x 5/32 (6.35 x 14.29 x 3.97)	156	78	25 (7.6)
8061-3130	3/8 x 21/32 x 5/32 (9.52 x 16.67 x 3.97)	136	68	25 (7.6)
8061-3190	1/2 x 13/16 x 5/32 (12.7 x 20.64 x 3.97)	126	63	25 (7.6)

# FH pumps & flowmeters

## **Proven leadership in fluid handling and flow control technology.**

Designed to handle a wide range of fluids, from the highest purity to extremely caustic solutions, our pumps are used in a broad range of critical applications that include cell-culture, tangential flow filtration, chromatography, dispensing and more.

Our pumps deliver valuable features and benefits to ensure reliable, long-term performance:

- Ergonomic design
- Broad operating range
- Ease of use and maintenance



For more product information, go to:  
[www.thermoscientific.com/fluidhandling](http://www.thermoscientific.com/fluidhandling)



## ► Thermo Scientific Nalgene Quick-Filling/Venting Closures

polypropylene, TPE gasket



**Nalgene™ Quick Filling/Venting closures feature quick-disconnect fittings with tubulation for attachment to the tubing of choice.**

Customizable ported 83B closure features panel-mounted, quick-disconnect fittings and inside/outside barbed fittings. Designed as a ready-made alternative to cumbersome in-house filling/dispensing solutions.

### details

- Available in 2 or 3 port styles for 1/4 or 3/8 in. (6.35 mm or 9.53 mm) tubing – offering an ideal platform for customization of your Nalgene Bottle or Carboy
- Container integrity is assured with internal valve style quick-disconnect fittings
- Ideal for use in vacuum systems with Nalgene Heavy-Duty Vacuum Carboys and Bottles (Cat. Nos. 2226 and 2126)
- Use with Nalgene 180 heavy-wall tubing (Cat. Nos. 8000-0145 or 8000-0065)
- Alternative and replacement fittings are available for further customization options (Cat. Nos. 2159)

*Disclaimer: Use with heavy-wall/vacuum tubing. Not recommended for vacuum use with lighter weight containers. Fitting-to-socket seals will not hold vacuum after multiple autoclavings.*

### Nalgene Quick-Filling/Venting Closures

Cat. No.	Hose Barb I.D., in. (mm)	No. of Ports	No. per Case
2158-0021	1/4 (6.35)	2	1
2158-0022	3/8 (9.53)	2	1
2158-0031	1/4 (6.35)	3	1
2158-0032	3/8 (9.53)	3	1



## ► Thermo Scientific Nalgene Replacement Coupling Inserts for Quick Filling/Venting Closure

polypropylene



**Nalgene™ Replacement Coupling Inserts support one-handed connection and disconnection when applied to mating coupling bodies.**

Male, barbed quick-disconnect replacement coupling inserts for use with Nalgene Quick Filling/Venting Closures.

### details

- For use with Nalgene Quick Filling Venting Closures (Cat. No. 2158)
- Promotes fewer leakpoints and faster installations

*Notes: 1/4 and 3/8 in. coupling inserts are not interchangeable.*

### Nalgene Replacement Coupling Inserts for Quick Filling/Venting Closure

Cat. No.	Tubing I.D., in. (mm)	No. per Case
<b>Straight</b>		
2159-0001	1/4 (6.35)	6
2159-0002	3/8 (9.53)	6
<b>Elbow</b>		
2159-0011	1/4 (6.35)	6
2159-0012	3/8 (9.53)	6

## ► Thermo Scientific Nalgene Filling/Venting Closures

white polypropylene, TPE gasket, TPE port caps, platinum-cured silicone tubing



**Nalgene™ Filling/Venting Closures are aseptic handling solutions for pharmaceutical, biotechnology and laboratory liquid transfer applications.**

Available for use with Nalgene bottles and carboys with either 53B or 83B closures, including pre-mounted lengths of platinum-cured silicone tubing for easy customization of bottles and carboys.

### details

- Ready to accept additional fluid transfer components such as aseptic connectors and air vent filters
- Closures are specifically designed to mate with most Nalgene bottles and carboys
- Leakproof systems for secure, aseptic handling of high-valued products compared to pouring

**Includes:** Nalgene platinum-cured silicone tubing and TPE port caps.

### Nalgene Filling/Venting Closures

Cat. No.	Tubing I.D., in. (mm)	Closure Size, mm	No. per Case
2162-0531	1/4 (6.35)	53	6
2162-0831	1/4 (6.35)	83	6
2162-0830	1/2 (12.7)	83	6

## ► Thermo Scientific Nalgene Barbed Bulkhead Fittings

polypropylene fittings, acetal nuts, silicone gaskets, TPE port caps



**Nalgene™ Barbed Bulkhead Fittings promote the customization of most Nalgene bottle and carboy closures for aseptic transfer of liquids.**

### details

- 53B closures will accept (two) 1/4 inch fittings
- Fittings are barbed at both ends to accept tubing inside and outside the container
- Autoclavable

**Includes:** Instructions, drilling template and a set of two panel-mount barbed fitting, acetal nuts and silicone gaskets.

### Nalgene Barbed Bulkhead Fittings

Cat. No.	Tubing I.D., in. (mm)	No. per Pack	No. per Case
6149-0001	1/4 (6.35)	2	24
6149-0002	1/2 (13)	2	24



## ► Thermo Scientific Nalgene Closures for InVitro Biotainer Bottles

polypropylene, silicone liner



**Nalgene™ 48 mm Filling/Venting Closures** are designed for aseptic handling solutions for pharmaceutical, biotechnology and laboratory liquid transfer applications.

Specifically designed to mate with Nalgene Biotainers with 48 mm closure.

### details

- Ready to accept additional fluid transfer components such as aseptic connectors and vent filters
- Available in 2- and 3-ported versions
- Gamma-irradiated stabilized material
- Ports have tubulations on inside and outside of the closure for attachment of tubing

### Nalgene Closures for InVitro Biotainer Bottles

Cat. No.	Description	Neck Finish	Port I.D., in. (mm)	No. per Case
2560-0489	3-ported closure	48	2-1/4 (6.35), 1-3/16 (4.76)	4
2560-0490	2-ported closure	48	2-1/4 (6.35)	4

## ► Thermo Scientific Nalgene Vacuum Check Valve and Positive Connector

high-density polyethylene; silicone diaphragm



**Nalgene™ Vacuum Check Valves** prevent back pressure with aspirator-type vacuum pumps.

Work best between 10- and 28 in. Hg. Designed for use with 1/4 in. (6.35 mm) – 5/16 in. (7.94 mm) I.D. tubing.

### details

- 2-piece design, easy to disassemble for cleaning
- Includes silicone diaphragm for prevention of back pressure

*Notes: Not for use with liquids.*

### Nalgene Vacuum Check Valve and Positive Connector

Cat. No.	Description	No. per Pack	No. per Case
6120-0010	Vacuum Check Valve for 1/4 in. (6.4 mm) to 5/16 in. (7.9 mm) I.D. Tubing	6	72

## ► Thermo Scientific Nalgene T-Type Tubing Connectors

polypropylene



**Nalgene™ T-Type Tubing Connectors are molded of polypropylene resin free of animal derived components.**

Non-tapered hose barbs maximize liquid flow.

### details

- Double bagged to maintain cleanliness
- Autoclavable

#### Nalgene Tubing T-Type Connectors

Cat. No.	Fits Tubing I.D., in. (mm)	No. per Pack	No. per Case
6151-0125	1/8 (3.18)	12	72
6151-0187	3/16 (4.76)	12	72
6151-0250	1/4 (6.35)	12	72
6151-0312	5/16 (7.94)	12	72
6151-0375	3/8 (9.53)	12	48
6151-0500	1/2 (12.7)	12	48

## ► Thermo Scientific Nalgene Y-Type Tubing Connectors

polypropylene



**Nalgene™ Y-Type Tubing connectors are molded of polypropylene resin free of animal derived components.**

Non-tapered hose barbs maximize liquid flow.

### details

- Double bagged to maintain cleanliness
- Autoclavable

#### Nalgene Tubing Y-Type Connectors

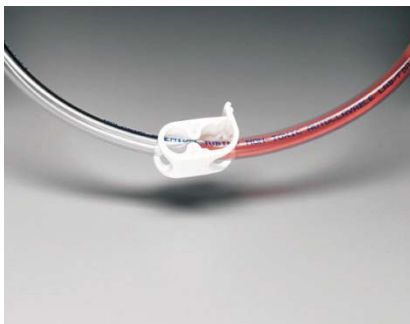
Cat. No.	Fits Tubing I.D., in. (mm)	No. per Pack	No. per Case
6152-0125	1/8 (3.18)	12	72
6152-0187	3/16 (4.76)	12	72
6152-0250	1/4 (6.35)	12	72
6152-0312	5/16 (7.94)	12	72
6152-0375	3/8 (9.53)	12	48
6152-0010	1/2 (12.7)	12	48





## ► Thermo Scientific Nalgene Pinch Clamp

polypropylene



**Nalgene™ Polypropylene Pinch Clamp allows precise, one-handed regulation of fluid flow.**

The molded one-piece design is ideal for use with Nalgene tubing.

### details

- Polypropylene construction will not corrode or deform like metal clamps
- Pinch clamp for 1/4 in. to 7/16 in. (6.35 - 11.11 mm) O.D. tubing
- One-piece design contains no sharp edges
- Autoclavable

### Nalgene Pinch Clamp

Cat. No.	Material	Fits Tubing O.D., in. (mm)	No. per Pack	No. per Case
6165-0002	Polypropylene	1/4 to 7/16 (6.35 to 11.11 )	12	72



## ► Thermo Scientific Nalgene One-Way Stopcocks

polypropylene; Teflon® TFE plug



**Nalgene™ Stopcocks promote accurate liquid flow control in liquid handling systems.**

Ideal for use in developing in-house fluid transfer systems.

### details

- Accepts 1/4 to 7/16 in. (6.35 to 11.11 mm) I.D. tubing
- One-way fluid path for accurate filling or dispensing
- Autoclavable

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corp.

### Nalgene Stopcocks

Cat. No.	Plug Bore, mm	Fits Tubing I.D. in. (mm)	No. per Pack	No. per Case
6460-0002	2	1/4 to 5/16 (6.35 to 7.94)	1	6
6460-0004	4	1/4 to 5/16 (6.35 to 7.94)	1	6

## ► Thermo Scientific Nalgene Three-Way Stopcocks

polypropylene; Teflon® TFE plug



**Nalgene™ Three-Way Stopcocks feature three tabulated ports arranged in a T shape.**

Ideal for use in developing in-house fluid transfer systems.

### details

- Accepts 1/4 to 7/16 in. (6.35 to 11.11 mm) I.D. tubing
- Use with any combination of two ports or all three ports
- Autoclavable

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corp.

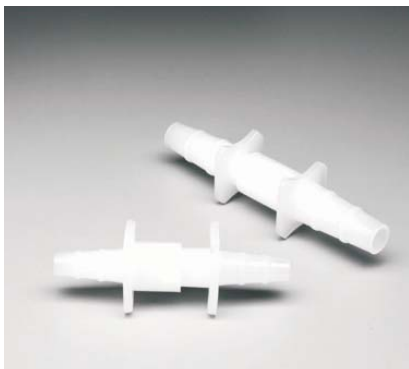
### Nalgene Three-way Stopcock

Cat. No.	Plug Bore, mm	Fits Tubing I.D., in. (mm)	No. per Pack	No. per Case
6470-0002	2	1/4 to 5/16 (6.35 to 7.94)	1	4
6470-0004	4	1/4 to 5/16 (6.35 to 7.94)	1	4



## ► Thermo Scientific Nalgene Quick Disconnects

high-density polyethylene



**Nalgene™ Quick Disconnects provide a solution for rapid, smooth connections between two fluid paths.**

Tubulations slide together snugly with a twist providing a fast, smooth connection.

### details

- Two tapered tubulations that fit tightly together with male/female connection, allowing for rapid joining or separation of fluid paths
- Available in sizes ranging from 1/4 to 5/16 in. (6.35 to 7.94 mm) and 3/8 to 7/16 in. (9.53 to 11.11 mm) to accommodate many types of fluid transfer needs

### Nalgene Quick Disconnects

Cat. No.	Fits Tubing I.D. in. (mm)	No. per Pack	No. per Case
6150-0010	1/4 to 5/16 (6.35 to 7.94)	12	72
6150-0020	3/8 to 7/16 (9.53 to 11.11)	12	72

## ► Thermo Scientific Nalgene Valved Quick Disconnects

polypropylene, acetal sleeve; stainless steel springs; EPR seal



**Nalgene™ Quick Disconnects are ideal for use in developing in-house fluid transfer systems.**

The couplings feature tubulation for attachment of tubing and an internal valve that seals when the fittings are removed, maintaining the integrity of your transfer liquids.

### details

- Chemically resistant polypropylene and EPDM o-ring can be gamma irradiated
- Leakproof termination of fluid paths when uncoupled
- Design promotes one-handed operation

### Nalgene Valved Barbed Quick Disconnects

Cat. No.	Fits Tubing I.D., in. (mm)	No. per Pack	No. per Case
6177-0250	1/4 (6.35)	2	12
6177-0375	3/8 (9.53)	2	12

## ► Thermo Scientific Nalgene 3/4 in. Mini Hose Barb Connectors polypropylene



**The Nalgene™ 3/4 in. Mini Hose Barb fitting allows easy connections of 3/4 in. sanitary fittings to flexible tubing.**

Ideal for use in developing in-house fluid transfer systems requiring sanitary style connections.

### details

- May be used in combination with 3/4 in. Mini Nalgene silicone gaskets and true-union clamps
- Autoclavable

#### Nalgene Mini Hose Barb Connectors

Cat. No.	Fits Tubing I.D., in. (mm)	No. per Pack	No. per Case
7210-0375	3/8 (9.53)	1	2
7210-0500	1/2 (12.7)	1	2

## ► Thermo Scientific Nalgene 1 in. Sanitary Hose Barb Connector polypropylene



**The Nalgene™ Sanitary Hose Barb fitting supports connections between 1-inch sanitary fittings to flexible tubing.**

Ideal for use in developing in-house fluid transfer systems requiring sanitary style connections.

### details

- May be used in combination with Nalgene 1 in. Sanitary Silicone Gaskets and true-union clamps
- Autoclavable

#### Nalgene 1 in. Sanitary Hose Barb

Cat. No.	Fits Tubing I.D., in. (mm)	No. per Pack	No. per Case
7211-0500	1/2 (12.7)	1	2



## ► Thermo Scientific Nalgene Cylindrical Tank with Cover polypropylene



**Nalgene™ PP Tanks with PP cover are autoclavable and available in a variety of sizes to meet application needs.**

### details

- Seamless construction for easy cleaning
- Offers excellent stress-crack resistance
- Economical alternative to stainless steel tanks
- Includes matching cover that significantly reduces evaporation and contamination

*Notes: All Nalgene tanks used at elevated temperatures or with high specific-gravity liquids should be externally supported.*

*Caution: Plastic tanks are generally subject to more severe conditions than plastic labware; exposure is constant, stresses are greater and different classes and concentrations of chemicals are involved. Please pay special attention to chemical compatibility.*

### Nalgene Cylindrical Tank with Cover

Cat. No.	Capacity, gal. (L)	Nominal O.D. x H, in. (cm)	No. per Case
11200-0005	5 (19)	11 x 15 (28 x 38)	1
11200-0007	7.5 (28)	12 x 18 (30 x 46)	1
11200-0010	10 (38)	13 x 20 (33 x 51)	1
11200-0015	15 (57)	14 x 28 (36 x 71)	1
11200-0030	30 (113)	18 x 30 (46 x 76)	1
11200-0055	55 (208)	22 x 36 (56 x 91)	1
11200-0100	100 (378)	28 x 44 (71 x 112)	1





## ► Thermo Scientific Nalgene Lightweight Graduated Cylindrical Tank with Cover high-density polyethylene



**Nalgene™ Lightweight Tanks are an economical solution for less rigorous applications.**

### details

- Seamless construction for easy cleaning
- Offers excellent stress-crack resistance
- Economical alternative to stainless steel tanks
- Includes matching cover that significantly reduces evaporation and contamination

*Notes: All Nalgene tanks used at elevated temperatures or with high specific-gravity liquids should be externally supported.*

*Caution: Plastic tanks are generally subject to more severe conditions than plastic labware; exposure is constant, stresses are greater and different classes and concentrations of chemicals are involved. Please pay special attention to chemical compatibility.*

### Nalgene Lightweight Graduated Cylindrical Tank with Cover

Cat. No.	Capacity, gal. (L)	Nominal O.D. x H, in. (cm)	No. per Case
54100-0005	5 (19)	11 x 15 (28 x 38)	1
54100-0007	7.5 (28)	12 x 18 (30 x 46)	1
54100-0010	10 (38)	13 x 20 (33 x 51)	1
54100-0015	15 (57)	14 x 28 (36 x 71)	1
54100-0030	30 (113)	18 x 30 (46 x 76)	1
54100-0055	55 (208)	22 x 36 (56 x 91)	1





## ► Thermo Scientific Nalgene Lightweight Cylindrical Tank with Cover and Spigot high-density polyethylene



**Nalgene™ Lightweight HDPE Cylindrical Tanks with installed spigots are an economical solution for less rigorous applications.**

These tanks offer the same characteristics as Nalgene 54100 tank series with a spigot installed for dispensing.

### details

- Seamless construction for easy cleaning
- Offers excellent stress-crack resistance
- Economical alternative to stainless steel tanks
- Includes matching cover that significantly reduces evaporation and contamination
- Equipped with Nalgene Needle Spigot (Cat. No. 96423) for dispensing

**Compatible products:** Nalgene Spigot for Storage Tanks (Cat. No. 6421-0010).

*Notes: All Nalgene tanks used at elevated temperatures or with high specific-gravity liquids should be externally supported.*

*Caution: Plastic tanks are generally subject to more severe conditions than plastic labware; exposure is constant, stresses are greater and different classes and concentrations of chemicals are involved. Please pay special attention to chemical compatibility.*

### Nalgene Lightweight Cylindrical Tank with Cover and Spigot

Cat. No.	Capacity, gal. (L)	Nominal O.D. x H, in. (cm)	No. per Case
54102-0005	5 (19)	11 x 15 (28 x 38)	1
54102-0007	7.5 (28)	12 x 18 (30 x 46)	1
54102-0010	10 (38)	13 x 20 (33 x 51)	1
54102-0015	15 (57)	14 x 28 (36 x 71)	1
54102-0030	30 (113)	18 x 30 (46 x 76)	1
54102-0055	55 (208)	22 x 36 (56 x 91)	1

## ► Thermo Scientific Nalgene Heavy Duty Cylindrical Tanks with Cover

high-density polyethylene tanks and covers



**Nalgene™ Heavy Duty HDPE Tanks with HDPE Covers** are rigid, seamless tanks offered in a variety of sizes to meet your application needs.

### details

- Features rigid walls for maximum strength and durability
- Molded of HDPE offering increased chemical and temperature resistance
- Includes matching cover that significantly reduces evaporation and contamination

**Compatible products:** Nalgene Tank Liners: Cat. No. 343050 series.

*Notes: All Nalgene tanks used at elevated temperatures or with high specific-gravity liquids should be externally supported.*

*Caution: Plastic tanks are generally subject to more severe conditions than plastic labware; exposure is constant, stresses are greater and different classes and concentrations of chemicals are involved. Please pay special attention to chemical compatibility.*

### Nalgene Heavy Duty Cylindrical Tanks with Cover

Cat. No.	Capacity, gal. (L)	Nominal O.D. x H, in. (cm)	No. per Case
11100-0005	5 (19)	11 x 15 (28 x 38)	1
11100-0007	7.5 (28)	12 x 18 (32 x 46)	1
11100-0010	10 (38)	13 x 20 (33 x 51)	1
11100-0015	15 (57)	14 x 28 (36 x 71)	1
11100-0030	30 (113)	19 x 30 (48 x 76)	1
11100-0055	55 (208)	22 x 36 (56 x 91)	1
11100-0080	80 (303)	24 x 48 (61 x 122)	1
11100-0100	100 (378)	28 x 44 (71 x 112)	1
11100-0150	150 (568)	32 x 49 (81 x 124)	1
11100-0200	200 (757)	37 x 51 (94 x 130)	1



## ► Thermo Scientific Nalgene Heavy Duty Cylindrical Tanks with Spigot

high-density polyethylene



**Nalgene™ Heavy Duty HDPE Tanks with a needle-type spigot for easy dispensing.**

### details

- Factory-installed spigot accepts 5/8 in. I.D. tubing
- Features rigid walls for maximum strength and durability
- Seamless construction for easy cleaning
- Molded of HDPE offering increased chemical and temperature resistance
- Includes matching cover that significantly reduces evaporation and contamination

**Compatible products:** Nalgene Spigot for Cylindrical Tanks  
(Cat. No. 6421-0010).

*Notes: All Nalgene tanks used at elevated temperatures or with high specific-gravity liquids should be externally supported.*

*Caution: Plastic tanks are generally subject to more severe conditions than plastic labware; exposure is constant, stresses are greater and different classes and concentrations of chemicals are involved. Please pay special attention to chemical compatibility.*

### Nalgene Heavy Duty Cylindrical Tanks with Spigot

Cat. No.	Capacity, gal. (L)	Nominal O.D. x H, in. (cm)	No. per Case
11102-0005	5 (19)	11 x 15 (28 x 38)	1
11102-0007	7.5 (28)	12 x 18 (30 x 46)	1
11102-0010	10 (38)	13 x 20 (33 x 51)	1
11102-0015	15 (57)	14 x 28 (36 x 71)	1
11102-0030	30 (113)	19 x 30 (48 x 76)	1
11102-0055	55 (208)	22 x 36 (56 x 91)	1

## ► Thermo Scientific Nalgene Tank Liners

coex polyethylene film



**Nalgene™ Coex Polyethylene Film Tank Liners feature an open-bag, flat-bottom design to enhance your mixing capabilities.**

Ideal for single-use, biopharmaceutical and diagnostic reagent fluid processing using rigid Nalgene cylindrical plastic tanks. Available in sizes ranging from 5 gal. to 200 gal. (19 L to 757 L).

### details

- Designed specifically to fit Nalgene cylindrical tanks from 5 gal. to 200 gal. (19 L to 787 L)
- Gamma irradiated, non-cytotoxic and certified non-pyrogenic
- Coex polyethylene film is free of animal-derived components

### Nalgene Tank Liners

Cat. No.	Capacity, gal (L)	Fits Nalgene Tank Cat. Nos.	No. per Pack	No. per Case
343050-0005	5 (19)	11100-0005 11200-0005 54100-0005	1	10
343050-0007	7.5 (28)	11100-0007 11200-0007 54100-0007	1	10
343050-0010	10 (38)	11100-0010 11200-0010 54100-0010	1	10
343050-0015	15 (57)	11100-0015 11200-0015 54100-0015	1	10
343050-0030	30 (113)	11100-0030 11200-0030 54100-0030	1	10
343050-0055	55 (208)	11100-0055 11200-0030 54100-0055	1	10
343050-0080	80 (303)	11100-0080	1	10
343050-0100	100 (378)	11100-0100	1	10
343050-0150	150 (568)	11100-0150	1	10
343050-0200	200 (757)	11100-0200	1	10





## ► Thermo Scientific Nalgene Rectangular Tank with Cover

polypropylene



**Nalgene™ Rectangular PP Tanks with PP Cover are autoclavable, available in a variety of sizes to meet application needs.**

### details

- Seamless construction for easy cleaning
- Suitable for use with many organic chemicals
- Offers excellent stress-crack resistance
- Includes matching cover that significantly reduces evaporation and contamination

#### Nalgene Rectangular Tank with Cover

Cat. No.	Capacity, gal. (L)	Nominal L x W x H, in. (cm)	No. per Case
14200-0002	2 (8)	8 x 8 x 9 (21 x 21 x 24)	1
14200-0005	5 (19)	10 x 10 x 14 (25 x 25 x 36)	1
14200-0010	10 (38)	12 x 12 x 14 (31 x 31 x 36)	1
14200-0015	15 (57)	18 x 13 x 14 (34 x 32 x 36)	1
14200-0020	20 (76)	18 x 13 x 20 (34 x 24 x 50)	1
14200-0045	45 (170)	24 x 18 x 20 (62 x 47 x 48)	1

## ► Thermo Scientific Nalgene Heavy Duty Rectangular Tank with Cover

high-density polyethylene



**Nalgene™ Heavy Duty HDPE Rectangular Tank with HDPE cover is a versatile, economical alternative to stainless steel tanks.**

### details

- Seamless construction for easy cleaning
- Stepped flange provides drip containment and grip for lifting
- Includes matching cover that significantly reduces evaporation and contamination
- Molded of HDPE offering increased chemical and temperature resistance

*Notes: All Nalgene tanks used at elevated temperatures or with high specific-gravity liquids should be externally supported.*

*Caution: Plastic tanks are generally subject to more severe conditions than plastic labware; exposure is constant, stresses are greater and different classes and concentrations of chemicals are involved. Please pay special attention to chemical compatibility.*

#### Nalgene Heavy Duty Rectangular Tank with Cover

Cat. No.	Capacity, gal. (L)	Nominal L x W x H, in. (cm)	No. per Case
14100-0002	2 (8)	8 x 8 x 9 (21 x 21 x 24)	1
14100-0005	5 (19)	10 x 10 x 14 (25 x 25 x 36)	1
14100-0010	10 (38)	12 x 12 x 14 (31 x 31 x 36)	1
14100-0015	15 (57)	18 x 13 x 14 (34 x 32 x 36)	1
14100-0020	20 (76)	18 x 13 x 20 (34 x 24 x 50)	1
14100-0040	40 (151)	24 x 13 x 13 (62 x 24 x 34)	1
14100-0045	45 (170)	24 x 18 x 20 (62 x 47 x 48)	1
14100-0065	65 (246)	24 x 18 x 25 (62 x 47 x 64)	1

## ► Thermo Scientific Nalgene Closed-Dome Tanks polypropylene



**Nalgene™ Closed Dome PP Tanks with white PP closure are an excellent choice for reagent storage, aseptic mixing and dispensing.**

Autoclavable and offered in a variety of sizes to meet application needs.

### details

- Designed for use as a closed containment system
- Includes 150 mm gasketed screw closure, greatly reducing evaporation and contamination
- Domed bottoms offer good drainage
- Mounting flats accept bulkhead fittings up to 2 in.
- Graduated in liters and gallons

**Compliance:** Comply with FDA Reg. 177.1520 and USP Class VI.

### Nalgene Closed-Dome Tanks

Cat. No.	Capacity, gal. (L)	Nominal O.D. x H*, in. (cm)	No. per Case
2650-0020	20 (76)	17 x 32 (42 x 79)	1
2650-0030	30 (114)	18 x 39 (47 x 99)	1
2650-0055	55 (210)	22 x 44 (57 x 112)	1
2650-0100	100 (380)	29 x 52 (72 x 132)	1

\* Height measurement includes closure.

## ► Thermo Scientific Nalgene Closed-Dome Tank Closure with Mixer Support Assembly



**Nalgene™ Closed-Dome Tank Closure with Mixed Support Assembly is for use with all sizes of Nalgene Closed-Dome Tanks.**

Unique sanitary flange assembly allows overhead mixing in a closed system.

### details

- 6 in. (15.2 cm) PP screw closure with a 2 in. (5.1 cm) sanitary ferrule welded in the center
- 2 in. (5.1 cm) silicone gasket and a PDVF True Union clamp
- Autoclavable
- Mixer not included

**Compatible Products:** Nalgene Closed-Dome Tanks (Cat. No. series 2650).



## ► Thermo Scientific Nalgene Spigots for Storage Tanks



**Nalgene™ Spigots for Storage Tanks are used for safe and efficient liquid dispensing.**

For use only with Nalgene tanks up to 100 gal. with factory installed threaded boss.

### details

- Includes two PTFE o-rings that provide positive seal

*Notes: Make sure container and spigot have compatible chemical resistance before installing.*

### Nalgene Spigots for Storage Tanks

Cat. No.	Fitting	No. per Pack	No. per Case
<b>Polypropylene</b>			
6421-0010	1.1/2 in. to 12 female screw thread	12	12
<b>Low-density polyethylene</b>			
6420-0750	19 mm NPT male thread	6	6
6420-0500	12.7 mm NPT male thread	6	6

## ► Thermo Scientific Nalgene Centrifuge Bottles

polypropylene copolymer with polypropylene closures



**Nalgene™ Centrifuge Bottles are ideal for large-volume cell harvesting, pelleting and protein purification.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of rigid and robust polypropylene copolymer, these translucent bottles are autoclavable and have excellent chemical resistance properties.

### details

- For low- to moderate-speed centrifugation of biological and chemical samples
- For proper performance, bottles must be filled to at least 80% of total capacity, except for 3120-9500 which must not be filled more than 75% of total capacity
- Polypropylene sealing caps assemblies available for 250 mL (DS3131-0038) and 1000 mL (DS3132-0063) sizes for added leakproof<sup>†</sup> assurance at higher speeds and fill volumes

*Notes: When spinning 250 mL bottle in Sorvall GSA rotor, use of the Nalgene centrifuge bottle adapter (DS3125-0250) is required.*

### Nalgene Centrifuge Bottles

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3120-0250	250	13,200 <sup>†</sup>	4	36
3120-0500	500	4,800	4	24
3120-9500	500	13,700	4	24
3120-1000	1000	7,100	4	16
3120-1010 <sup>‡</sup>	1000	7,100	4	16

<sup>†</sup> Up to 27,500 xg with sealing cap assembly

<sup>‡</sup> For use with IEC rotors



## ► Thermo Scientific Nalgene Centrifuge Bottles with Sealing Closure

polypropylene copolymer, polypropylene closure



**Nalgene™ Centrifuge Bottles are ideal for large-volume cell harvesting, pelleting and protein purification.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of rigid and robust PPCO, these translucent bottles are autoclavable and have excellent chemical resistance properties.

### details

- For low- to moderate-speed centrifugation of biological and chemical samples
- Bottle includes PP sealing cap assembly with silicone gasket for added leakproof assurance at maximum speeds or when spinning hazardous materials
- For proper performance bottles must be filled to 80% of total capacity

*Notes: When spinning 250 mL bottle in a Sorvall™ GSA rotor, use of the Nalgene centrifuge bottle adapter (DS3125-0250) is required.*

### Nalgene Centrifuge Bottles with Sealing Closure

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3141-0250	250	27,500	4	36
3141-0500	450	13,700	4	24





## ► Thermo Scientific Nalgene Centrifuge Bottles

polycarbonate with polypropylene closures



**Nalgene™ Centrifuge Bottles are ideal for large-volume cell harvesting, pelleting and protein purification.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of translucent polycarbonate, these translucent bottles are autoclavable and have excellent mechanical strength properties.

### details

- For low-speed centrifugation of biological and chemical samples
- Molded of translucent polycarbonate for easy visualization of samples
- For added leakproof<sup>®</sup> assurance at maximum speeds or when spinning hazardous materials, use with PP sealing caps assemblies; available for 250 mL (Cat. No. DS3131-0038) and 1000 mL (Cat. No. DS3132-0063) sizes
- For proper performance, bottles must be filled to at least 80% of total capacity

*Notes: When spinning 250 mL bottle in Sorvall GSA rotor, use of the Nalgene centrifuge bottle adapter (Cat. No. DS3125-0250) is required.*

### Nalgene Centrifuge Bottles

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3122-0250	250	27,500	4	36
3122-0500	500	13,700	4	24
3122-1000	1000	7100	4	16
3122-1010	1000	7100	4	16





## ► Thermo Scientific Nalgene Centrifuge Bottles with Sealing Closure

polycarbonate with polypropylene closures



**Nalgene™ Centrifuge Bottles are ideal for large-volume cell harvesting, pelleting and protein purification.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of transparent PC, these translucent bottles are autoclavable and have excellent mechanical strength properties.

### details

- For low- to moderate-speed centrifugation of biological and chemical samples
- Molded clear PC for easy visualization of samples
- PP sealing cap closure with silicone gasket, for added leakproof<sup>†</sup> assurance at maximum speeds or when spinning hazardous materials
- For proper performance bottles must be filled to 80% of total capacity

*Notes: When spinning 250 mL bottle in a Sorvall™ GSA rotor, use of the Nalgene centrifuge bottle adapter (DS3125-0250) is required.*

### Nalgene Centrifuge Bottles with Sealing Closure

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3140-0250	250	27,500	4	36
3140-0500	450	13,700	4	24



## ► Thermo Scientific Nalgene Teflon® FEP Centrifuge Bottle

Teflon® fluorinated ethylene-propylene, Tefzel™ ethylene-tetrafluoroethylene closure



**Nalgene™ Teflon® FEP Centrifuge Bottles are ideal for low-speed, lipid and phenol extractions, digestions and precipitations.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of autoclavable, translucent FEP, these bottles resist most acids, bases and organic solvents.

### details

- Use in temperatures from -100°C to +150°C
- FEP provides excellent chemical resistance, ideal for large-volume extraction, digestion and precipitation procedures requiring the use of aggressive chemicals
- For proper performance, must be filled to 100% of total capacity
- For added leakproof<sup>†</sup> assurance at maximum speeds or when spinning hazardous materials use with PP sealing caps assemblies (DS3131-0038)

*Notes: When spinning 250 mL bottle in a Sorvall™ GSA rotor, use of the Nalgene centrifuge bottle adapter (Cat. No. DS3125-0250) is required.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corp.

### Nalgene Teflon® FEP Centrifuge Bottle

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3127-0250	250	4,000	1	6

## ► Thermo Scientific Nalgene Centrifuge Bottles

high-density polyethylene with polypropylene closures



**Nalgene™ Centrifuge Bottles are ideal for large-volume cell harvesting, pelleting and protein purification requiring refrigerated temperatures.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of rigid and robust HDPE, these translucent bottles have excellent chemical resistance properties and are rated for temperatures as low as -100°C.

### details

- For low-speed centrifugation of biological and chemical samples
- Excellent for use in refrigerated centrifuges
- Rated for use in temperatures as low as -100°C
- Rated for forces up to 8,000 ×g
- For proper performance bottles, must be filled to at least 80% of total capacity

*Notes: When spinning 250 mL bottle in a Sorvall™ GSA rotor, use of the Nalgene centrifuge bottle adapter (Cat. No. DS3125-0250) is required*

### Nalgene Centrifuge Bottles

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3121-0250	250	8,000	6	36



## ► Thermo Scientific Nalgene Centrifuge Bottle Adapter

low density polyethylene



**Nalgene™ Centrifuge Bottle Adapter** provides support to all Nalgene 250 mL bottles for proper fit in Sorvall GSA rotors.

### details

- Molded of white, low-density polyethylene
- For use with Nalgene centrifuge bottles: Cat. Nos. 3120-0250, 3121-0250, 3127-0250, 3140-0250 and 3141-0250

### Nalgene Centrifuge Bottle Adapter

Cat. No.	Description	No. per Pack	No. per Case
DS3125-0250	Centrifuge Bottle Adapter for 250 bottles	6	6

## ► Thermo Scientific Nalgene Sealing Cap Assembly

polypropylene closure with silicone gasket



**Nalgene™ Sealing Cap Assemblies** ensure leakproof service of Nalgene centrifuge bottles at their recommended maximum rated speeds.

### details

- PP closures with silicone gasket
- Recommended for use when spinning hazardous materials

### Nalgene Sealing Cap Assembly

Cat. No.	Closure Size, mm	Fits Cat. No.	No. per Case
DS3132-0058	58	3140-0250, 3141-0250	2
DS3132-0063	63	3120-1000, 3120-1010, 3122-1000, 3122-1010, 3140-0500, 3141-0500	2

## ► Thermo Scientific Nalgene Spherical-Bottom Centrifuge Bottle

polycarbonate, polypropylene closure



**Nalgene™ Spherical-Bottom Centrifuge Bottles are ideal for large-volume cell harvesting, pelleting and protein purification.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of transparent PC, these translucent bottles are autoclavable and have excellent mechanical strength properties.

### details

- For low- to moderate-speed centrifugation of biological and chemical samples
- Molded of transparent PC for easy visualization of samples
- Spherical-bottom design facilitates pellet formation and retrieval
- For proper performance, bottles must be filled to 80% of the total capacity

*Notes: For use in standard rotors, the use of the Nalgene spherical-bottom adaptor Cat. No. DS3124-0010 is recommended.*

### Nalgene Spherical-Bottom Centrifuge Bottle

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3123-0250	250	27,500	4	36

## ► Thermo Scientific Nalgene Spherical-Bottom Centrifuge Bottle Adapter

polycarbonate



**Nalgene™ Spherical-Bottom Centrifuge Bottle Adapter is specifically designed to mate with Cat. No. 3123-0250 for use in standard centrifuge rotors.**

### details

- Molded of rigid and robust white polycarbonate for assured durability.
- Total height of Nalgene spherical-bottom centrifuge bottle with closure and adapter is 137.5 mm

### Nalgene Spherical-Bottom Centrifuge Bottle Adapter

Cat. No.	Description	No. per Pack	No. per Case
DS3124-0010	Spherical-Bottom Centrifuge Bottle Adaptor	4	4





## ► Thermo Scientific Nalgene Conical-Bottom Centrifuge Bottle

polypropylene copolymer, polypropylene sealing closure



**Nalgene™ Conical-Bottom Centrifuge Bottles** are designed for pelleting applications such as cell culture harvesting and protein biochemistry, including ammonium sulfate precipitations.

Molded of rigid and robust PPCO, these translucent bottles are autoclavable and have excellent chemical resistance properties.

### details

- For low- to moderate-speed centrifugation of biological and chemical samples
- Bottle includes PP sealing cap assembly with silicone gasket for added leakproof assurance at maximum speeds or when spinning hazardous materials
- Proper performance requires that bottles must be filled to 80% of the total capacity
- Autoclavable, graduated, leakproof†

**Requires:** Must be used with Nalgene adapter for conical-bottom centrifuge bottles (Cat. No. DS3126-0175).

#### Nalgene Conical-Bottom Centrifuge Bottle

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3143-0175	175	27,500	4	36

## ► Thermo Scientific Nalgene Conical-Bottom Centrifuge Bottle

polycarbonate, polypropylene sealing closure



**Nalgene™ Conical-Bottom Centrifuge bottles** are designed for pelleting applications such as cell culture harvesting and protein biochemistry, including ammonium sulfate precipitations.

Molded of transparent polycarbonate, these transparent bottles are autoclavable and offer excellent mechanical strength.

### details

- For low- to moderate-speed centrifugation of biological and chemical samples
- Bottle includes PP sealing cap assembly with silicone gasket for added leakproof assurance at maximum speeds or when spinning hazardous materials
- For proper performance bottles must be filled to 80% of total capacity
- Autoclavable, transparent, leakproof†, with molded-in graduations

**Requires:** Must be used with Nalgene adapter for conical-bottom centrifuge bottles (Cat. No. DS3126-0175).

#### Nalgene Conical-Bottom Centrifuge Bottle

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3144-0175	175	27,500	4	36

## ► Thermo Scientific Nalgene Conical-Bottom Centrifuge Bottle

polystyrene, high-density polyethylene closure



**Nalgene™ Sterile Conical-Bottom Centrifuge Bottles are an economical and disposable solution for low-speed, large-volume cell harvesting, pelleting and protein purification.**

The perfect fit with Thermo Scientific Fiberlite carbon fiber rotors. Molded of PS, these translucent bottles are individually wrapped and ready to use.

Well suited for sterile cell culture applications. Designed for use in low-speed refrigerated or non-refrigerated centrifuges up to 5800 xg.

### details

- Molded of transparent PS for easy visualization of samples
- Well suited for sterile cell culture applications
- Designed for use in low-speed refrigerated or non-refrigerated centrifuges up to 5800 xg
- Gamma-radiation sterilized, individually wrapped and ready to use
- Molded-in graduations to assist with volume measurements
- For proper performance, bottles must be filled to at least 80% of total capacity

**Requires:** Must be used with Nalgene adapter for conical-bottom centrifuge bottles (DS3126-0175).

### Nalgene Conical-Bottom Centrifuge Bottle

Cat. No.	Nominal Capacity, mL	Max Force, xg	No. per Pack	No. per Case
3145-0175	175	5800	12	48

## ► Thermo Scientific Nalgene Conical-Bottom Centrifuge Bottle Adapter

polycarbonate



**Nalgene™ Conical-Bottom Bottle Adapter is designed for use with Cat. Nos. 3143, 3144, and 3145.**

### details

- Molded of rigid, robust white PC for assured durability
- Centrifugation of Nalgene Conical Bottom Centrifuge Bottles (Cat. Nos. 3143, 3144, 3145) requires this adapter

### Nalgene Conical-Bottom Centrifuge Bottle Adapter

Cat. No.	Description	No. per Pack	No. per Case
DS3126-0175	Conical Bottom Centrifuge Bottle Adapter	4	4

**Thermo Scientific Products –**  
*meeting the challenges of science and industry*

# superspeed centrifuges

**Deliver outstanding throughput  
and processing power combined with  
innovation, quality and reliability.**

The Thermo Scientific Sorvall RC 6 Plus centrifuge provides exceptional processing flexibility with a full array of rotors – from lightweight and corrosion-resistant Fiberlite® carbon fiber, to swinging bucket and specialty rotors. Its advanced design ensures the highest quality results everyday, perfectly matched to your most demanding centrifugation applications in pharmaceutical, biotechnology and academic research.

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## ► Thermo Scientific Nalgene 1 L Super Speed Centrifuge Bottles with Sealing Closure



**Nalgene™ 1 L Super Speed Centrifuge Bottles with Sealing Closure are designed to boost productivity and pellet recovery in high-speed, large-volume gross separation applications.**

The perfect fit to Fiberlite™ carbon fiber rotors. Molded of transparent PC and PPCO, these bottles are autoclavable and have excellent mechanical strength properties.

### details

- Process a full liter in each bottle at speeds up to 15,810 xg
- Smooth inner walls reduces sheering in mammalian culture separations
- Ideal for bacterial, yeast tissue isolations and viral harvesting
- Choose PC for excellent clarity and mechanical strength
- Choose PPCO copolymer for excellent chemical resistance
- Designed to fit FiberLite™ F6S 6 x 1000Y, F8S 6 x 1000Y, and F9S 4 x 1000Y carbon fiber rotors
- Recommended operating temperature range 4° to 22°C; storage to -70°C
- Includes 3-piece sealing cap assembly, PP plug, closure and silicone gasket for added leakproof<sup>†</sup> assurance
- USP Class VI compliant, non-cytotoxic, autoclavable

### Nalgene 1 L Super Speed Centrifuge Bottles with Sealing Closure

Cat. No.	Material	Max Force, xg	No. per Pack	No. per Case
3140-1006	Polycarbonate	15,810	6	6
3141-1006	Polypropylene copolymer	15,810	6	6





## ► Thermo Scientific Nalgene 2 L Bio Bottle with Sealing Closure

polypropylene copolymer, polypropylene closure with silicone gasket



**Nalgene™ 2 L Bio Bottle offers a solution for the separation of large-volume harvests in a single run.®**

Designed for use in Thermo Scientific RC12BP Plus Centrifuges and H-12000 Swing Bucket Rotors, an exact fit ensures optimal performance. Ideal for bacterial, yeast and tissue isolations.

### details

- Process up to 12 L in a single run at speeds up to 7333 xg
- Graduated, wide-mouth design simplifies decanting, re-suspensions and pellet removal
- Conical shape and smooth inner surface assures compact pellet formation
- For centrifugation operating temperatures from 4°C to 22°C and storage to 0°C
- The use of support bridge (Cat. No. 75007686) is required
- 2 L Bio Bottles must be filled to at least 80% of the total capacity for optimal performance

**Includes:** White PP sealing screw closure with silicone gasket for leakproof assurance.

**Compliance:** Meets USP VI, non-cytotoxic, non-hemolytic.

### Nalgene 2 L Bio Bottle with Sealing Closure

Cat. No.	Description	Max Force, xg	No. per Pack	No. per Case
3120-2006	2 L Bio Bottle, non-sterile	7333	6	6
3120-2024	2 L Bio Bottle, sterile	7333	1	24





## ► Thermo Scientific Nalgene Bottle Low & High Speed Selector Guide

Nomical Volume	Cat. No.	Nominal Vol., mL	Description	Nom. Dim. Dia. x H., mm	Material	Maximum RCF (xg)		Closure Size (mm)	Closure Options Cat. No.
						4°C	22°C		
175 mL	3143-0175	175	Conical wide-mouth bottle, sealing cap	61.8 x 139.4	PPCO	27,500	27,500	58	DS3132-0058
175 mL	3144-0175	175	Conical wide-mouth bottle, sealing cap	61.8 x 140.5	PC	27,500	27,500	58	DS3132-0058
175 mL	3145-0175	175	Conical wide-mouth bottle, screw top, sterile	61.5 x 135.6	PS	5800	5,800	53	712150-0530
250 mL	3120-0250	250	Bottle, screw top	61.8 x 125.2	PPCO	13,200†	13,200†	38	DS3131-0038
250 mL	3122-0250	250	Bottle, screw top	61.8 x 125.2	PC	27,500	27,500	38	DS3131-0038
250 mL	3121-0250	250	Bottle wide-mouth, screw top	61.2 x 131.6	HDPE	8000	8000	43	712150-0430
250 mL	3123-0250	250	Spherical bottom bottle, screw top	61.8 x 140.0	PC	27,500	27,500	38	DS3131-0038
250 mL	3127-0250	250	Bottle, screw top	59.9 x 126.5	FEP	4000	NR	38	DS3131-0038
250 mL	3140-0250	250	Bottle wide-mouth, sealing cap	61.8 x 134.4	PC	27,500	27,500	58	DS3132-0058
250 mL	3141-0250	250	Bottle wide-mouth, sealing cap	61.1 x 132.8	PPCO	27,500	27,500	58	DS3132-0058
500 mL	3140-0500	450	Bottle wide-mouth, sealing cap	69.5 x 159.5	PC	24,336	24,336	63	DS3132-0063
500 mL	3141-0500	450	Bottle wide-mouth, sealing cap	69.5 x 159.3	PPCO	24,336	24,336	63	DS3132-0063
500 mL	3120-0500	500	Bottle, screw top	73.8 x 168.9	PPCO	4800	4800	48	
500 mL	3120-9500	500	Bottle, screw top	69.5 x 168.9	PPCO	13,700	13,700	48	
500 mL	3122-0500	500	Bottle, screw top	69.5 x 168.9	PC	13,700	13,700	48	
1000 mL	3120-1000	1000	Bottle, screw top	98.0 x 174.2	PPCO	7100	7100	63	DS3132-0063; 712150-0630
1000 mL	3122-1000	1000	Bottle, screw top	98.1 x 177.0	PC	7100	7100	63	DS3132-0063; 712150-0630
1000 mL	3140-1006	1000	Bottle, sealing cap	97.5 x 195.3	PC	15,810	15,810	84.5	DS3132-BLUE
1000 mL	3141-1006	1000	Bottle, sealing cap	97.5 x 195.3	PPCO	15,810	15,810	84.5	
1000 mL	3120-1010	1000	Bottle, screw top (IEC)	98.0 x 168.4	PPCO	7100	7100	63	DS3132-0063; 712150-0630
1000 mL	3122-1010	1000	Bottle, screw top (IEC)	98.1 x 189.7	PC	7,100	7,100	63	DS3132-0063; 712150-0630
2000 mL	3120-2006	2000	2 L BioBottle, sealing cap	175.5 x 111.5 x 209.3	PPCO	7,333	7,333	63	DS3132-0063
2000 mL	3120-2024	2000	2 L BioBottle, screw top, sterile	175.5 x 111.5 x 200.2	PPCO	7,333	7,333	63	DS3132-0063; 712150-0630

† Up to 27,500 xg with sealing cap assembly

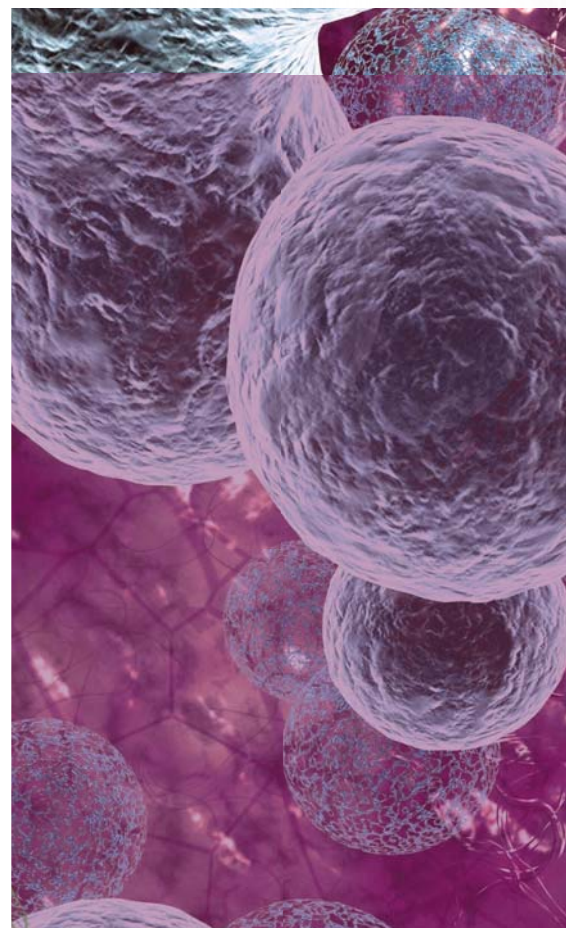


## cell culture | 96-135

### Elevating quality and performance in cell culture.

Distinction is our legacy. For more than 50 years, Thermo Scientific cell culture products have been a cornerstone of quality and dependability among researchers and scientists worldwide.

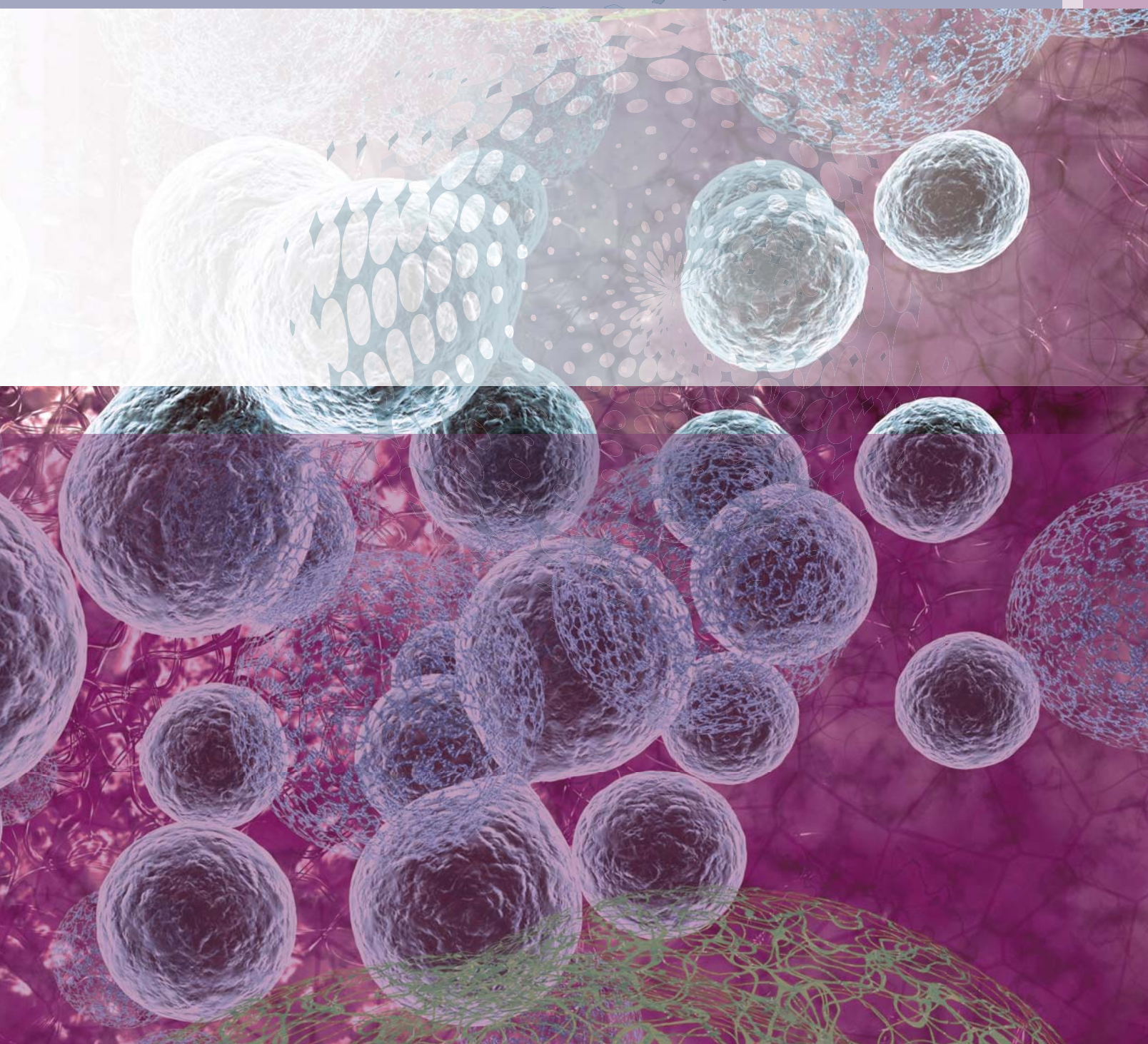
Today, our cell culture portfolio is built on a framework of innovative surface technologies and formats that achieve optimal consistency and growth across a variety of cell types – representing traditional as well as stem cell lines and IVF applications. Our portfolio also includes filtration products, with relevant membrane offerings to collectively optimize sterility and safety in your process. Our products are further enhanced by offerings that assist in the rigorous requirements of fluid transfer – a challenge met by the precision of our serological pipettes and conical tubes.



- For more information about Thermo Scientific cell culture solutions visit:

[www.thermoscientific.com/cellculture](http://www.thermoscientific.com/cellculture)





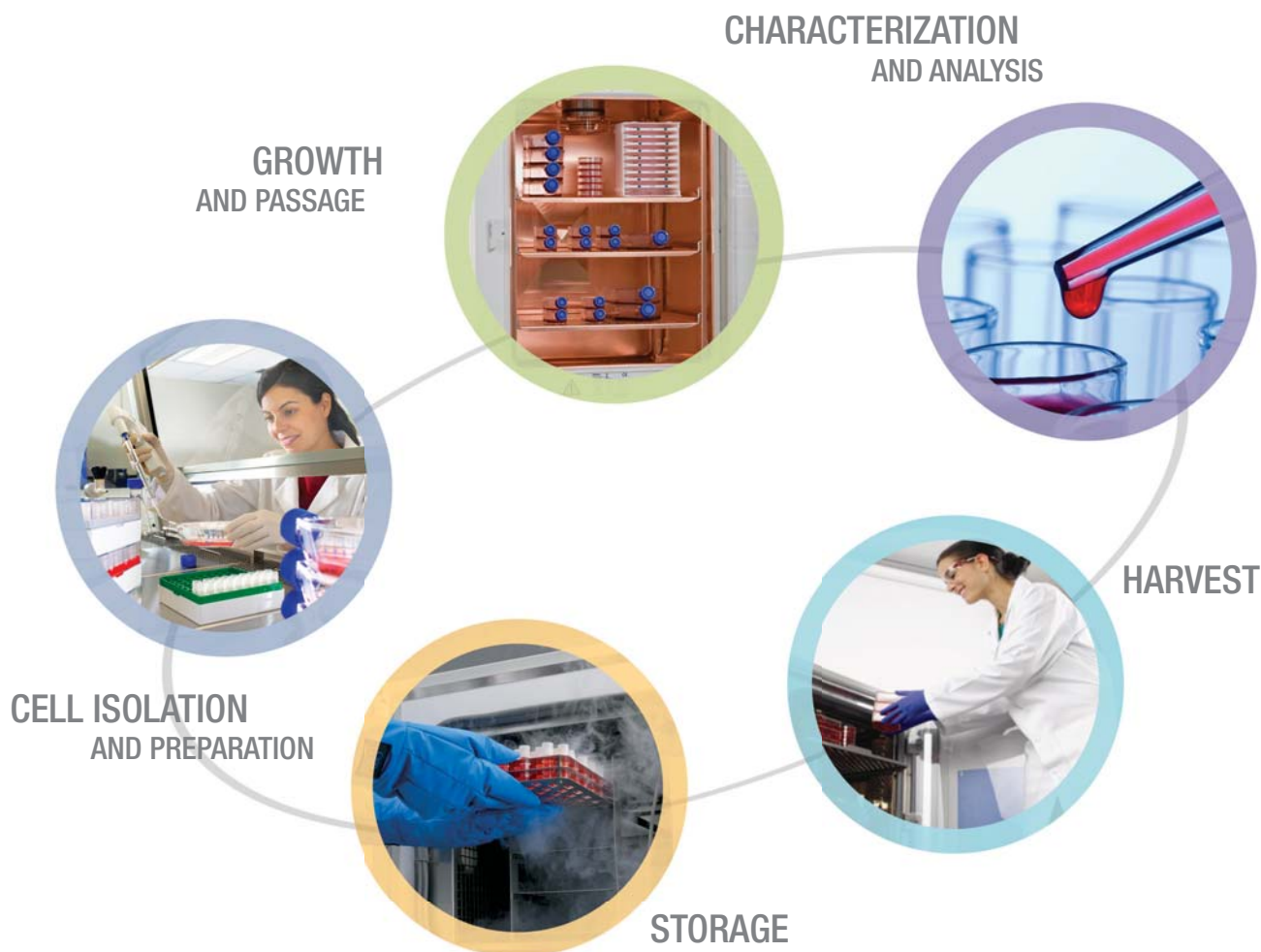
**consistent** growth



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## Optimizing Your Results Across Every Stage of Cell Culture

Cell culture research is becoming more challenging everyday, making the requirement for superior product quality and performance across each stage of cell culture more critical than ever.

Thermo Fisher Scientific offers a complete portfolio of cell culture products and solutions that lead the industry worldwide in quality, choice and innovation – so researchers can advance their work with complete confidence.





## ► Surface Selection Guide

To help ensure the most flexible, reproducible and reliable results across every stage of cell culture, Thermo Scientific Nunc™ offers an extensive range of products spanning a variety of formats, sizes and surfaces. The following charts will help guide product selection, with specific cell types and desired cell culture ranges in mind.

### Select Your Surface

Thermo Scientific Cell Culture Surfaces			Nunclon Delta	Nunclon Vita	Collagen I	Poly-D-Lysine	Low Cell Binding	HydroCell	UpCell	Untreated Surface
Cell Types	Hepatocytes		•	•	•				•	
	Endothelial Cells		•		•				•	
	Neuronal Cells	Neuronal Cells	•			•			•	
		Neurosphere					•	•		
	Epithelial Cells		•	•	•				•	
	Tumor Cells		•	•	•	•			•	
	Blood Cells	Macrophages, Dendritic Cells, Neutrophils	•						•	
		Lymphocytes	•				•	•		•
		Platelet	•		•				•	
	Stem Sells	MSC	•	•					•	
		HSC	•							
		ESC	•*	•**						
		EB					•	•		

\* Requires matrix coating.

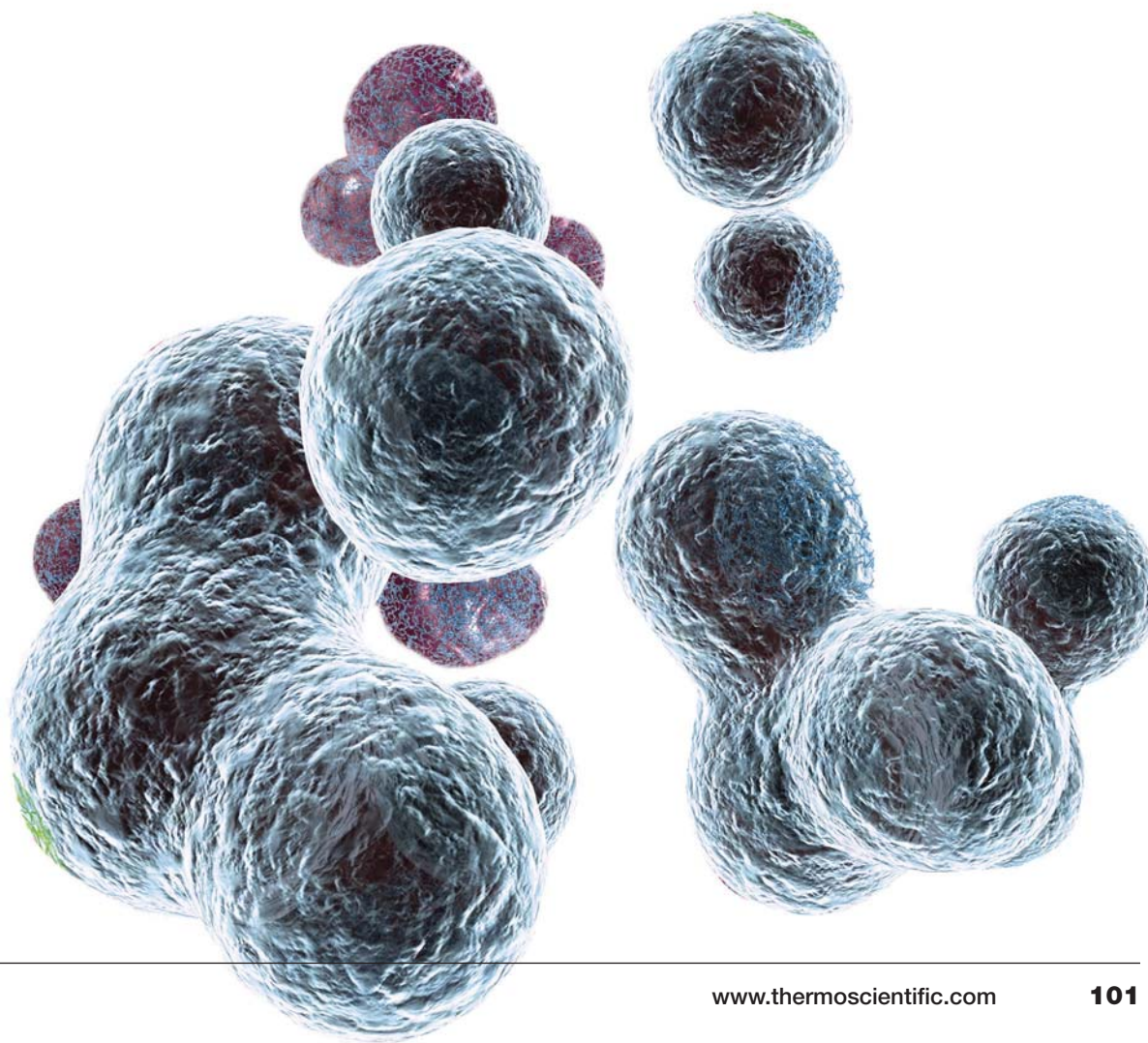
\*\* Requires conditioned media from feeder cells and ROCK inhibitor.

### Select Your Format

Thermo Scientific Cell Culture Surfaces			Nunclon Delta	Nunclon Vita	Collagen I	Poly-D-Lysine	Low Cell Binding	HydroCell	UpCell	Untreated Surface
Format Types	Flasks	25 - 500 Culture Area Range (cm <sup>2</sup> )	Standard T25-T175	•						•
			EasYFlask T25-T225	•	•	•				•
			Triple Flask T500	•						•
	Dishes (Cell Culture Treated & Petri)	8.8 - 150 Culture Area Range (cm <sup>2</sup> )	35 mm	•				•	•	•
			60 mm	•			•	•	•	
			90 mm				•			
			100 mm	•				•	•	
			150 mm	•						
			OmniTray	•						
	Multidishes	1.9 - 1.1 /well Culture Area Range (cm <sup>2</sup> )	4-well	•						•
			6-well	•	•	•	•	•	•	•
			12-well	•			•	•	•	•
			24-well	•			•	•	•	•
			48-well	•				•	•	•
			96-well	•				•	•	•

## Mechanism of Action

- **Energy treatment:** The energetic surface oxidation improves polystyrene surface hydrophilicity and results in generation of both hydroxyl and carboxyl functional groups. The presence of these hydrophilic groups facilitates the protein unfolding needed for cell attachment.
- **Extracellular matrix (ECM) coating:** Passive adsorption of biological materials such as ECM facilitates the adhesion of finicky cells by mimicking the action of basal lamina substrates on cell culture surfaces.
- **Polymer graft:** Covalent binding of polymers to polystyrene enables special functions to the cell culture surface (e.g. super-hydrophilic polymer prevents cells from adhering to Low Cell Binding and HydroCell surfaces; thermoresponsive polymer enables enzyme-free detachment of cells by reducing the external culture temperature).
- **Untreated polystyrene:** The smooth and hydrophobic polystyrene surface allows non-adherent cell culture at low cost.





## ► Thermo Scientific Nunc EasYFlasks with Filter or Vent/Close Caps

cell culture treated



Filter caps for continuous venting:

The caps are fitted with a hydrophobic filter to ensure consistent gas exchange.



"Y" mark indicating "vent" or "closed"

Any of the legs pointing vertically upwards indicates that the cap is in vent position.

Any of the legs pointing vertically downwards indicates that the flask is closed.

**Nunc™ EasYFlasks™ are Nunclon™ Delta treated, a proprietary cell culture surface treatment that offers maximum adhesion for a broad range of cell types.**

The ergonomic design with angled neck and wide opening allows easy access to the cell growth surface by pipets or cell scrapers. The slightly angled side walls allow complete viewing under a microscope.

Nunc EasYFlasks with Nunclon Delta treated surface are designed for enhanced cell attachment, growth and differentiation.

### details

- Ergonomic design with a 1/3 turn to open, close or vent
- Low profile maximizes incubator space
- Volume graduations printed and molded on both sides, provides increased visibility when filling flasks for consistency, flask to flask
- Wide, angled neck design facilitates pipette and cell scraper access
- Slightly angled side walls allows complete viewing under a microscope
- Sterilized by gamma irradiation and certified to be non-pyrogenic

### Vent/close Caps

- Vent/close caps feature a "Y" mark that allows visual verification of vent position
- Vent position easily distinguished even when flasks are stacked in incubators

### Filter Caps

- Filter membrane provides effective barrier against microorganisms
- Well-defined, hydrophobic filter membrane offers continuous venting with consistent gas exchange and no lot-to-lot variation
- Chemically robust membrane meets USP class VI standards and is produced without animal-derived substances

**Includes:** Caps

### Accessories: Loose Caps for Nunc EasYFlasks Nunclon Delta Sterile

Cat. No.	Closure	Use for flask size, cm	Units per Pack/ Case
158892	Vent/close	25	1/100
158523	Filter	25	1/100
158240	Vent/close	75	1/100
157527	Filter	75	1/100
133001	Vent/close	175/225	1/100
933002	Filter	175/225	1/100

### Nunc EasYFlasks with Filter or Vent/Close Caps

Cat. No.	Surface	Closure	Culture Area, cm <sup>2</sup>	Working Vol., mL	No. per Pack	No. per Case
156367	Nunclon Delta-treated	Filter	25	7	10	200
156499	Nunclon Delta-treated	Filter	75	25	5	100
159910	Nunclon Delta-treated	Filter	175	55	5	30
159934	Nunclon Delta-treated	Filter	225	70	5	30
156340	Nunclon Delta-treated	Vent/Close	25	7	10	200
156472	Nunclon Delta-treated	Vent/Close	75	25	5	100
159920	Nunclon Delta-treated	Vent/Close	175	55	5	30
159933	Nunclon Delta-treated	Vent/Close	225	70	5	30

## ► Thermo Scientific Nunc Flasks with Filter or Vent/Close Caps

cell culture treated



**Nunc™ Cell Culture Flasks are Nunclon Delta treated, a proprietary cell culture surface treatment that offers maximum adhesion for a broad range of cell types.**

These flasks are individually leak tested and offer growth areas from 25-175 cm<sup>2</sup>. The filter caps allow constant airflow and minimize chance of contamination.

Nunc Flasks with Nunclon Delta treated surface are designed for enhanced cell attachment, growth and differentiation. Unique hydrophobic 0.22 µm filter cap utilizes a three-dimensional matrix of nonwetable polyethylene fibers that prevent penetration of microorganisms.

### details

- Short, wide necks allow for easy access
- Sterilized by gamma irradiation and certified to be non-pyrogenic
- Barcoded 175 cm<sup>2</sup> flasks with large Code 128 are compatible with automation

**Includes:** Caps.

#### Nunc Flasks with Filter and Vent/Close Caps

Cat. No.	Neck Style	Culture Area, cm <sup>2</sup>	Working Vol., mL	Bar Code	Closure	No. per Pack	No. per Case
136196	Angled	25	7	----	Filter	20	160
178905	Straight	80	30	----	Filter	5	50
178883	Straight	175	68	----	Filter	1	32
178885	Straight	175	68		Filter	4	32
178983	Straight	175	68	Large Code 128	Filter	1	32
178985	Straight	175	68	Large Code 128	Filter	4	32
163371	Angled	25	7		Vent/Close	20	160
153732	Straight	80	30		Vent/Close	5	50
156502	Straight	175	68		Vent/Close	4	32
156505	Straight	175	68		Vent/Close	4	32

## ► Thermo Scientific Caps for Flasks Nunclon Delta



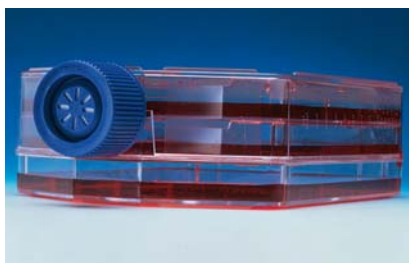
#### Caps for Flasks Nunclon Delta

Cat. No.	Closure	Color	For Flasks	Units per Pack	No. per Case
151209	Filter	Blue	25 cm <sup>2</sup>	1	100
151152	Vent/Close	Blue	25 cm <sup>2</sup>	1	100
144652	Filter	Blue	80 cm <sup>2</sup>	1	100
144458	Vent/Close	Blue	80 cm <sup>2</sup>	1	100
147104	Filter	Blue	175 cm <sup>2</sup>	1	100
147074	Vent/Close	Blue	175 cm <sup>2</sup>	1	100



## ► Thermo Scientific Nunc TripleFlasks

cell culture treated



**Nunc™ TripleFlasks offer maximum surface area within the foot print of a standard flask.**

Provides a total culture area of 500 cm<sup>2</sup> by way of three parallel layers and a straight neck design that works effectively within automation systems. The Nunc TripleFlask utilizes the Nunclon™ Delta treatment, a proprietary cell culture surface treatment that offers maximum adhesion for a broad range of cell types.

Three layers of growth surfaces provide a total culture area of 500 cm<sup>2</sup> in the same footprint as a standard 175 cm<sup>2</sup> flask.

### details

- Recommended working volume is 200 mL
- Promotes conventional, flat, monolayer culturing
- Ideal for large cell mass applications such as drug screening and scale up
- External dimensions of 175 cm<sup>2</sup>
- Also offered barcoded with large Code 128
- Available in two packaging configurations: single- and four-pack

### Nunc TripleFlasks

Cat. No.	Description	Culture Area cm <sup>2</sup>	No. per Pack	No. per Case
132867	Vent/Close, Without Barcode	500	1	32
132913	Filter Closure, Without Barcode	500	1	32
132920	Filter Closure, With Barcode	500	1	32
132935	Filter Closure, Without Barcode	500	4	32
132925	Filter Closure, With Barcode	500	4	32
132865	Vent/Close, With Barcode	500	4	32

### Caps for Flasks Nunclon Delta

Cat. No.	Closure	Color	For Flasks	Units per Pack	No. per Case
146003	Filter	White	175/185/500 cm <sup>2</sup>	1	100
147074	Vent/Close	Blue	175/185/500 cm <sup>2</sup>	1	100
147104	Filter	Blue	175/185/500 cm <sup>2</sup>	1	100





## ► Thermo Scientific Nunc Dishes

cell culture treated



**Nunc™ Dishes are designed for optimal performance and offer a broad range of sizes and styles to suit a variety of experimental needs.**

The cell culture dishes receive the Nunclon™ Delta surface treatment, a proprietary surface modification that promotes maximum adhesion for a broad range of cell types. The Petri dishes are made from high-quality and optically-clear polystyrene.

Nunc culture dishes with a variety of sizes and designs are made from high-quality, optically-clear polystyrene.

### details

- Nunclon Delta treated dishes are optimized for cell attachment
- Top and bottom stacking rings for easier handling and more stable stacking
- Sterilized by gamma irradiation
- Come with or without air vents for gas exchange
- The culture dishes with 2 x 2 mm grid are ideal for cloning experiments and determination of plating efficiency; 174926 and 169558 feature 2 mm grids
- Cat. Nos. 171099 and 150340 for suspension culture – (not Nunclon)

**Ordering Information:** For dish dimensions, see product specifications.

**Certifications:** Offered with certificate of traceability and quality (one certificate per case).

Nunc Dishes

Cat. No.	Style	Culture Area, cm <sup>2</sup>	Culture Surface	Working Vol., mL	O.D. x H, mm	Grid Size	Vented	No. per Pack	No. per Case
150318	With lid, without airvent	8.8	Nunclon Delta treated	3	35 x 10	NA	No	10	500
153066	With lid, airvent	8.8	Nunclon Delta treated	3	35 x 10	NA	Yes	10	500
174926	With lid, airvent	8.8	Nunclon Delta treated	3	35 x 10	2 x 2 mm	Yes	20	500
171099	With lid, airvent	8.8	—	3	35 x 10	NA	Yes	20	500
174888	With lid, airvent	21.5	Nunclon Delta treated	5	60 x 15	NA	Yes	20	500
150326	With lid, without airvent	21.5	Nunclon Delta treated	5	60 x 15	NA	No	10	400
150288	With lid, airvent	21.5	Nunclon Delta treated	5	60 x 15	NA	Yes	10	400
150340	With lid, airvent	21.5	—	3	60 x 15	NA	Yes	10	400
169558	With lid, airvent	21.5	Nunclon Delta treated	5	60 x 15	2 x 2 mm	Yes	10	400
150350	With lid, airvent	56.7	Nunclon Delta treated	5	100 x 15	NA	Yes	10	150
150679	With lid, airvent	56.7	Nunclon Delta treated	12.5	100 x 15	NA	Yes	10	450
172958	With lid, airvent	56.7	Nunclon Delta treated	12.5	100 x 20	NA	Yes	10	480
168381	With lid, airvent	145	Nunclon Delta treated	35	150 x 20	NA	Yes	10	80
157150	With lid, airvent	150	Nunclon Delta treated	35	150 x 20	NA	Yes	10	120
166508	With lid, without airvent	500	Nunclon Delta treated	135	245 x 245 x 25	NA	No	4	15



## ► Thermo Scientific Nunc Multidishes

cell culture treated



### Nunc™ Cell Culture Multidishes are Nunclon™ Delta treated.

This proprietary surface modification promotes maximum adhesion for a broad range of cell types and ensures optimum performance. Nunclon Delta surface treatment ensures optimum performance for cell adhesion.

#### details

- Flat well bottom and stackable
- Raised well rims lower risk of cross contamination
- Sterilized by gamma irradiation and certified to be non-pyrogenic
- Excellent optical quality
- Alphanumeric codes for well identification

#### Round Well Styles

- Feature vented lids for gas exchange
- Recessed areas around wells act as a water reservoir to reduce evaporation from wells
- Lids with notched corners for easy orientation

#### Rectangular Well Styles

- Large culture area
- Accepts standard glass cover slips: 24 × 60 mm for 4-well plate; and 22 × 22 mm for 8-well plate

**Ordering Information:** 24-well plates are 17 mm deep; 4-well plate is 10 mm deep.

**Certifications:** Offered with certificate of traceability and quality (one certificate per case).

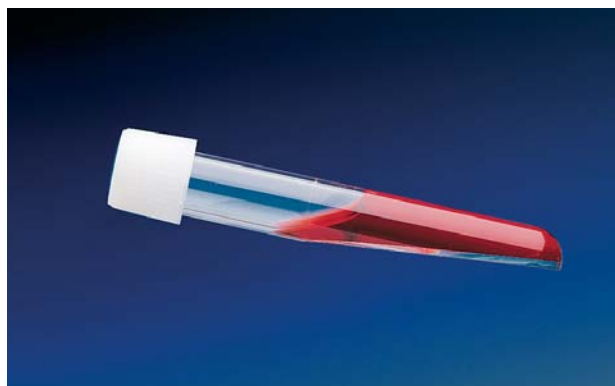
#### Nunc Multidishes

Cat. No.	Surface Culture	No of Wells	O.D., mm	Well Shape	Culture Area, cm <sup>2</sup>	Working Vol., mL	No. per Pack	No. per Case
176740	Nunclon Delta	4	66 x 66	Round	1.9	1	4	500
167063	Nunclon Delta	4	128 x 86	Rectangular	21.8	5	10	500
140675	Nunclon Delta	6	128 x 86	Round	9.6	3	1	500
140685	Nunclon Delta	6	128 x 86	Round	9.6	3	5	500
167064	Nunclon Delta	8	128 x 86	Rectangular	10.5	3	10	500
150628	Nunclon Delta	12	128 x 86	Round	3.5	2	1	400
142475	Nunclon Delta	24	128 x 86	Round	1.8	1	1	400
142485	Nunclon Delta	24	128 x 86	Round	1.8	1	5	400
150687	Nunclon Delta	48	128 x 86	Round	1.1	0.5	1	400
152640	Nunclon Delta	48	128 x 86	Round	1.1	0.5	5	150



## ► Thermo Scientific Nunc Tubes

cell culture treated



**Nunc™ Tubes receive the Nunclon™ Delta treatment, a proprietary cell culture surface treatment that offers maximum performance for a broad range of cell types and applications.**

### details

- Round-bottom version with screw or push-on cap
- Flat-sided tube for culture of adherent cells
- Flat side allows easy microscopy, a coverslip can be used in the tube
- Medium retained in the flat-sided tube in horizontal position
- Excellent optical quality
- Nunclon Delta certified

### Nunc Tubes

Cat. No.	Shape	L x W, mm	Culture Area, cm <sup>2</sup>	Working Vol., mL	Cap Type	No. per Pack	No. per Case
145470	Round	100 x 13	—	7	Screw cap	100	600
146183	Round	100 x 14	—	7	Push-on cap	100	600
156758	Flat-sided tube	110 x 16	5.5	3	Screw cap	75	450



## ► Thermo Scientific Nunc OmniTray

cell culture treated



**Nunc™ OmniTray™ is a versatile tool ideal for screening libraries and DNA hybridization, as well as standard cell culture applications.**

### details

Flat bottom, single-well tray with high optical clarity makes it easy to see colonies. Available as standard version with notched corners and rectangular version optimized for computerized imaging and splitting.

- Nunclon™ Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Optical clarity makes colonies easy to see
- Can be frozen at -20°C
- Stackable with high, sturdy walls
- Sterile polystyrene
- Same external footprint as a 96 MicroWell™ Plate
- Includes matching lid

### Nunc OmniTray acts as:

- Holder for membrane when dot blotting
- Container for denaturation, hybridization and washing steps
- Storage container for membranes

### Cat. No. 140156

- Features an enhanced rectangular shape ideal for automatic picking and viewing systems

**Recommended for:** Dot blotting, denaturation/hybridization/washing, bacterial growth, membrane storage.

**Compliance:** All microplates manufactured by Nunc meet the recommendation of American National Standards (ANSI) (ANSI/SBS 1-2004).

### Nunc OmniTray

Cat. No.	Surface	Well Design	Color	Total Vol., μL	Culture Area, cm <sup>2</sup>	Sterile	With Lid	No. per Pack	No. per Case
165218	Nunclon Delta	1 Rectangular	Clear	90	84	Yes	Yes	10	60
140156	Nunclon Delta	1 Rectangular	Clear	90	84	Yes	Yes	10	90



## ► Thermo Scientific BioLite Cell Culture Products

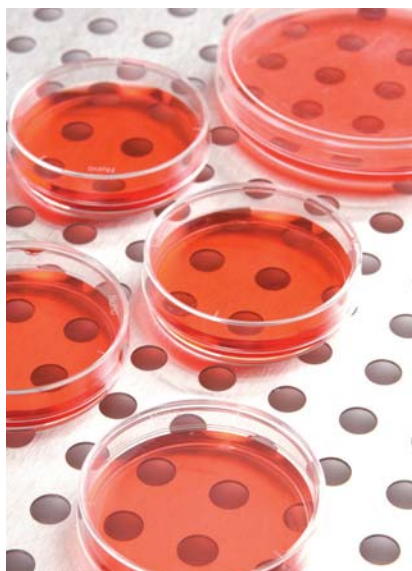


### BioLite Cell Culture Products: economical performance for your general cell culture procedures.

BioLite Cell Culture products are designed for your general cell culture research, ideal when an economical, quality choice matters. This product line includes a limited range of sterile flasks covering surface areas from 25 cm<sup>2</sup> to 175 cm<sup>2</sup>; dishes from 35 mm to 150 mm, and 6- to 96-well dishes. BioLite products offer a cell-adherent surface and are non-pyrogenic and non-cytotoxic.

#### details

- Cell culture treated
- Sterile
- Non-pyrogenic
- USP Class VI and non-cytotoxic



#### Biolite Flasks

Cat. No.	Culture Area, cm <sup>2</sup>	Cap Type	Suggested Working Vol., mL	No. per Pack	No. per Case
130189	25	Vent	7	5	200
130192	25	Plug Seal	7	5	200
130190	75	Vent	25	5	100
130193	75	Plug Seal	25	5	100
130191	175	Vent	50	5	40
130194	175	Plug Seal	50	5	40

#### Biolite Dishes

Cat. No.	H x O.D., mm	I.H. x Dia., mm	Culture Area, cm <sup>2</sup>	Suggested Working Vol., mL	No. per Pack	No. per Case
130180	10 x 35	9.3 x 34.3	9.4	3	10	500
130181	15 x 60	12.6 x 52.7	21.5	5	10	500
130182	20 x 100	16 x 88	60.8	12.5	10	200
130183	20 x 150	15.4 x 138.5	148	35	10	120

#### Biolite Multidishes and Microwell Plate

Cat. No.	Well Design	Well Dim., mm	Outer L x W, mm	Color	Culture Area, cm <sup>2</sup>	Suggested Working Vol., mL	Lid	Sterile	No. per Pack	No. per Case
130184	6F	35	127.6 x 85.4	Clear	9.6	3	Yes	Yes	1	50
130185	12	22.1	127.6 x 85.4	Clear	3.8	2	Yes	Yes	1	50
130186	24	15.6	127.6 x 85.4	Clear	1.9	1	Yes	Yes	1	50
130187	48	9.75	127.6 x 85.4	Clear	0.75	0.5	Yes	Yes	1	50
130188	96F	6.4	127.6 x 85.4	Clear	0.32	0.2	Yes	Yes	1	50



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## ► Thermo Scientific Nunc EasYFlasks

Poly-D-Lysine or Collagen I coated



**Nunc™ EasYFlasks™ with extracellular matrix coating enhances cell attachment to the culture surface.**

Poly-D-Lysine or Collagen I coating encourages cell attachment of finicky cells to the culture surface.

### details

- Wide opening and angled neck allows easy access to the culture area
- Ergonomic closure, open or close in 1/3 turn
- Ideal for culturing cells that do not bind to regular cell culture treated surface
- Poly-D-Lysine is a chemically synthesized, animal-free coating material
- Sterile and non-pyrogenic

#### Filter Caps

- Filter membrane provides effective barrier against microorganisms
- Well-defined, hydrophobic filter membrane offers continuous venting with consistent gas exchange and no lot-to-lot variation
- Chemically robust membrane meets USP class VI standards and is produced without animal-derived substances

**Recommended for:** Cell culture.

**Includes:** Filter Caps.

#### Nunc EasYFlasks

Cat. No.	Surface	Closure	Culture Area, cm <sup>2</sup>	Working Vol., mL	No. per Pack	No. per Case
132703	Poly-D-Lysine coated	Filter	25	7	10	60
132704	Poly-D-Lysine coated	Filter	75	25	5	30
132705	Poly-D-Lysine coated	Filter	175	55	5	30
132706	Collagen I coated	Filter	25	7	10	60
132707	Collagen I coated	Filter	75	25	5	30
132708	Collagen I coated	Filter	175	55	5	30



## ► Thermo Scientific Nunc Multidishes

### Poly-D-Lysine or Collagen I Coated



**Nunc™ Multidishes with extracellular matrix coating enhance cell attachment to the culture surface. Ideal for culturing finicky cells.**

#### details

- Ideal for culturing finicky cells that do not attach to regular cell culture treated surface
- Poly-D-Lysine is a chemically synthesized animal-free coating material
- Sterile and non-pyrogenic

#### Nunc Multidishes

Cat. No.	Surface Coating	Working Vol., mL	Culture Area, cm <sup>2</sup>	No. of Wells	No. per Pack	No. per Case
152035	Poly-D-Lysine coated	3	9.6	6	5	20
152034	Collagen I, rat tail	3	9.6	6	5	20

## ► Thermo Scientific Nunc Multidish 6

### Nunc™ Vita



**Nunc™ Nunc Vita is a unique energy-treated polystyrene surface that enables growth of stem cells and other temperamental cells directly on the surface without matrix coatings or feeder layers.**

When combined with conditioned media, supplemented with a ROCK inhibitor, Nunc Vita surface supports attachment and expansion of human pluripotent stem cells.

Nunc Vita Surface supports attachment and growth of finicky cells (e.g. HEK 293, MSC) in the absence of feeder layers and matrix coatings. In conditioned media, supplemented with ROCK inhibitor, human ESC can be cultured directly on the Nunc Vita Surface for more than 10 passages while maintaining normal karyotype and pluripotency.

#### details

- Animal component-free surface
- Consistent performance from lot to lot
- Supports attachment and growth of temperamental cells (e.g. HEK 293, MSC)
- Supports attachment and expansion of human pluripotent stem cells in conditioned media containing ROCK inhibitor
- Allows non-enzymatic dissociation of human pluripotent stem cells with removal of ROCK inhibitor

#### Nunc Multidish 6

Cat. No.	Description	Working Vol., mL	Culture Area, cm <sup>2</sup>	No. of Wells	Bottom Shape	Sterile	No. per Pack	No. per Case
145380	Nunc Vita Multidish 6	3	9.6 cm <sup>2</sup> /well	6	Flat	Yes	1	4



## ► Thermo Scientific Nunc Dishes

### HydroCell Surface



**Nunc™ Dishes with HydroCell Surface feature super-low cell binding capacity with premium quality to inhibit the attachment of adherent cells and enable the formation of cell clusters such as embryoid bodies and neurospheres. The HydroCell Surface is designed to prevent cell attachment.**

A covalently-immobilized, super hydrophilic polymer forms a thin, even layer on cultureware, resulting in minimal cell adhesion and protein adsorption. Depending on cell type, cells can be grown as a suspension of single cells or cell clusters.

#### details

- Minimal cell adhesion for high yield of cells; eliminates unwanted adhesion-induced differentiation
- Ideal for culturing embryoid bodies, neurospheres, or other anchorage-independent cell clusters
- Minimal protein adsorption – high yield of cell-secreted proteins
- Sterile and non-pyrogenic

#### Nunc Dishes

Cat. No.	Style, mm	L x W, mm	Working Vol., mL	No. per Pack	No. per Case
174913	35	40 x 12	3	5	30
174912	60	60 x 15	5	5	30
174911	100	92 x 17	12.5	1	6



## ► Thermo Scientific Nunc Multidishes

### HydroCell Surface



**Nunc™ Multidishes with HydroCell Surface feature super-low cell binding capacity with premium quality to inhibit the attachment of adherent cells and enable the formation of cell clusters such as embryoid bodies and neurospheres. The HydroCell surface is designed to prevent cell attachment.**

A covalently immobilized super hydrophilic polymer forms a thin, even layer on cultureware, resulting in minimal cell adhesion and protein adsorption. Depending on cell type, cells can be grown as a suspension of single cells or as a suspension of cell clusters.

#### details

- Minimal cell adhesion – high yield of cells and eliminate unwanted adhesion-induced differentiation
- Minimal protein adsorption – high yield of cell-secreted proteins
- Ideal for culturing embryoid bodies, neurospheres, or other anchorage-independent cell clusters
- Individually wrapped with lid
- Sterile and non-pyrogenic

#### Nunc Multidishes

Cat. No.	Surface	Well Design	Color	Culture Area, cm <sup>2</sup>	Sterile	Lid	No. per Pack	No. per Case
174919	HydroCell	6 F	Clear	9.6	Yes	Yes	1	6
174909	HydroCell	24 F	Clear	1.9	Yes	Yes	1	6
174910	HydroCell	12 F	Clear	0.35	Yes	Yes	1	6
174908	HydroCell	96 U	Clear	0.36	Yes	Yes	1	8
174907	HydroCell	96 F	Clear	0.33	Yes	Yes	1	8





## ► Thermo Scientific Nunc Dishes and Multidishes

low cell binding surface

**Nunc™ Low Cell Binding surface prevents attachment of adherent cells to the surface, therefore allowing formation of anchorage-independent cell colonies such as embryoid bodies and neurospheres.**

### details

- Prevents attachment of adherent cells to the surface
- Ideal for culturing embryoid bodies, neurospheres, or other anchorage-independent cell clusters
- Sterilized by gamma-irradiation and certified to be non-pyrogenic

**Includes:** Lid

### Nunc Dishes and Multidishes

Cat. No.	Description	Working Vol., mL	No. per Pack	No. per Case
145389	60 mm Tissue Culture Dish	5	10	20
145401	90 mm Tissue Culture Dish	10	10	20
145383	6 well Multidish	3	1	7
145385	12 well Multidish	2	1	7
145387	24 well Multidish	1	1	7

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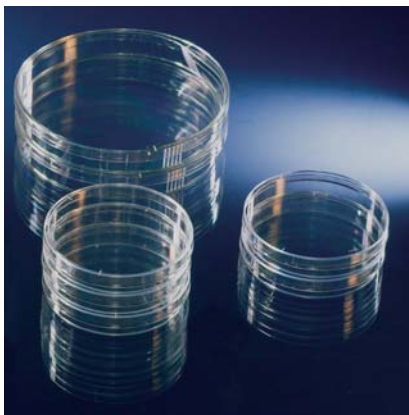
**ClickSeal® Biocontainment Lids:** One-handed, certified sample protection



For more product information, go to:  
**[www.thermoscientific.com/spinit](http://www.thermoscientific.com/spinit)**

## ► Thermo Scientific Nunc Dishes and Multidishes

### UpCell Surface



**Nunc™ Multidishes with UpCell Surface feature a temperature-responsive surface that supports non-enzymatic harvesting of adherent cells for preservation of cell viability and surface proteins.**

Simply transfer the culture to room temperature and cells can be collected in suspension or in the form of a “cell sheet”.

Traditional cell harvesting by enzymatic and mechanical methods often compromise the integrity of surface proteins and the viability of harvested cells. By contrast, the UpCell Surface allows cell harvesting by simply reducing the temperature of the cell culture to below 32°C without the need of enzymes, resulting in highly viable cells with intact cell surface proteins.

#### details

- No trypsinization – preserve cell surface proteins
- No physical force – get high cell viability
- Perfect for culture passaging, single-cell analyses and cell transplantation research
- 6-well multidish comes with supportive membranes that enable harvesting of cell sheets and creations of 3-D tissue models
- Minimal hands-on time

**Recommended for:** Culture passaging, single-cell analyses, cell transplantation research, 3D tissue models.

#### Nunc Dishes

Cat. No.	Style, mm	Culture Area, cm <sup>2</sup>	Grid, mm	L x W, mm (in.)	Supportive Membrane (for harvesting “cell sheet”)	Working Vol., mL	No. per Pack	No. per Case
174905	100	56.7	3 x 3	92 x 17 (3.6 x 0.6)	Not included	12.5	1	6
174902	100	56.7	No	92 x 17 (3.6 x 0.6)	Not included	12.5	1	6
174903	60	21.5	No	60 x 15 (2.3 x 0.5)	Not included	5	5	30
174906	60	21.5	3 x 3	60 x 15 (2.3 x 0.5)	Not included	5	5	30
174904	35	8.8	No	40 x 12 (1.5 x 0.4)	Included	3	5	30

#### Nunc Multidishes

Cat. No.	Well Design	Supportive membrane (for harvesting “cell sheet”)	Color	Membrane	Culture Area, cm <sup>2</sup>	Suggested Working Vol., mL	Sterile	Lid	No. per Pack	No. per Case
174901	6 F	Included	Clear	Yes	9.6	3	Yes	Yes	1	6
174900	12 F	Not Included	Clear	No	3.5	2	Yes	Yes	1	6
174899	24 F	Not Included	Clear	No	1.9	1	Yes	Yes	1	6
174898	48 F	Not Included	Clear	No	1.1	0.5	Yes	Yes	1	6
174897	96 F	Not Included	Clear	No	0.33	0.2	Yes	Yes	1	8

#### UpCell Membrane Supports

Cat. No.	Fits dish size, mm	No. per Pack
174924	60 mm	20
174923	100 mm	20
174922	12 wells	12
174921	24 wells	24
174920	48 wells	48



## ► Thermo Scientific Nunc OptiCell Cell Culture System



**Nunc™ OptiCell™ Culture Systems are sterile systems created from two parallel, gas-permeable, cell culture-treated polystyrene membranes unique for growing, monitoring and transporting cells.**

All-in-one unique cell culture vessel features sterile fluid paths, stable pH, consistent oxygen and carbon dioxide levels and uses significantly less incubator space.

Innovative solution for growth, storage, transport and imaging. All in one cell culture vessel.

### details

- Gas permeable polystyrene membrane provides a stable growth environment
- Eliminate contamination risk with a sterile fluid path
- Transport live cells using IATA requirements for the shipment of biological substances or category B specimens
- Maximize incubator space and reduce medium consumption
- Easily track samples with barcoded chambers

### Includes:

- **OptiCell 1100 Starter Kit:** 20 each of OptiCell 1100, rack, knife, 50 tips, optical shield, manual, mini-CD
- **OptiCell MAX 2100 Starter Kit:** 5 each of OptiCell MAX, rack, 50 tips, Hybridoma production protocol, manual

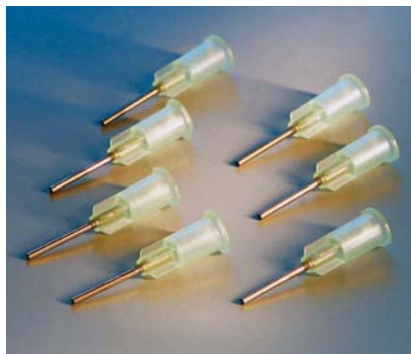
**Recommended for:** Production of monoclonal antibodies, cytokines, and other secreted molecules.

### Nunc OptiCell Cell Culture System

Cat. No.	Description	No. per Case
155330	OptiCell 1100 Starter Kit	OptiCell 1100 Starter Kit, Contains: 20 OptiCell 1100 chambers, 1 rack, 1 knife, 50 tips, 2 caps, 1 optical shield, manual and mini-CD
155331	OptiCell 1100 Cartridges only, Case of 20	20
155332	OptiCell 1100 Cartridges only, Case of 100	100
155333	OptiCell 1100 Cartridges only, Case of 500	500
155334	OptiCell MAX 2100 Starter Kit	OptiCell MAX 2100 Starter Kit, Contains: 50 OptiCell MAX 2100 chambers, 1 rack, 50 tips and hybridoma Ab production protocol manual
155335	OptiCell MAX 2100 Cartridges only, Cs. of 20	20
155336	OptiCell MAX 2100 Cartridges only, Cs. of 100	100



## ► Thermo Scientific Nunc OptiCell Accessories and Replacement Parts



**Nunc™ OptiCell™ Accessories and Replacement Parts are designed to work with the OptiCell Cell Culture systems.**

### details

Accessories for OptiCell, an innovative solution for growth, storage, transport and imaging of cells.

- **OptiMag Cell Separation Kit:** 5 each of OptiCell 1100, rack, 50 tips, magnet, cell separation protocol, manual
- **OptiCell Mailer:** 5 each OptiCell 1100, five mailers, 50 tips, manual, shipping protocol
- **OptiCell Rack** holds 20 OptiCell or 10 OptiCell MAX chambers; multiple racks can be connected together
- **OptiCell Syringe Tips** are stainless steel 18 gauge blunt tip, sterile and nonpyrogenic; fit standard syringes, for one use only
- **OptiCell Knife** can be used to remove growth membranes from the frame for sectioning and are supplied individually wrapped, sterile; may be autoclaved up to three times

### Nunc OptiCell Accessories and Replacement Parts

Cat. No.	Description	No. per Pack	No. per Case
155342	OptiCell Rack	1	1
155344	OptiCell Knife	1	3
155343	OptiCell Syringe Tips	1	100
155337	OptiMag Cell Separation Kit: 5 each of OptiCell MAX, rack, 50 tips, magnet, Cell Separation protocol, manual	1	3
155338	OptiMag Magnet		1
155339	OptiCell Mailer Starter Kit: 5 each OptiCell 1100, five mailers, 50 tips, manual, shipping protocol		
155340	Mailers only		10





## ► Thermo Scientific Nunc Flasks

non-treated



**Nunc™ Flasks are non-treated, sterile flasks that are designed for culturing suspension cells.**

Nunc non-treated cell culture flasks are made of high-quality, optically-clear polystyrene for suspension cell culture.

### details

- White caps for easy identification
- Angled neck for easy access to full growth area
- Ergonomic filter cap allows constant airflow and minimizes chance of contamination
- TripleFlask with three parallel layers and footprint of a standard 175 cm<sup>2</sup> flask with same external dimensions
- Sterilized by gamma irradiation and certified to be non-pyrogenic

**Includes:** Flask with cap.

#### Nunc Flasks

Cat. No.	Working Vol., mL	Culture Area, cm <sup>2</sup>	No. per Pack	No. per Case
169900	7	25	10	200
156800	30	75	5	100
159926	55	175	5	30
132903	200	500	4	32

## ► Thermo Scientific Nunc Sterile Flask Replacement Filter Caps

filter and vented, untreated



**Nunc™ Flask Replacement Filter Caps are individually packed.**

Allows constant airflow and minimizes chance of contamination. Nunc sterile filter caps are made with HDPE and GORE™ dPTFE membrane.

### details

- Filter membrane provides effective barrier against microorganisms
- Chemically robust membrane meets USP class VI standards and is produced without animal-derived substances
- Well-defined, hydrophobic filter membrane offers continuous venting with consistent gas exchange and no lot-to-lot variation
- Individually wrapped to ensure sterility

#### Nunc Sterile Flask Replacement Filter Caps

Cat. No.	Closure	Color (Cap)	For Flasks	No. per Pack	No. per Case
178802	Filter	White	Nunc EasYFlasks™ 25 cm <sup>2</sup>	1	100
156753	Filter	White	Nunc EasYFlasks 75 cm <sup>2</sup>	1	100
146003	Filter	White	175/185/500 cm <sup>2</sup>	1	100



## ► Thermo Scientific Nunc Multidishes

non-treated



**Nunc™ Multidishes are non-treated and sterile for suspension of cell cultures and have excellent optical properties.**

### details

- Non-treated, sterile polystyrene multidishes for suspension cell culture
- Flat-bottom round wells, with lid
- Raised-well rims lower the risk of cross-contamination
- Lid with notched corners for good fit and easy orientation
- Non-pyrogenic

**Includes:** Lids

### Nunc Multidishes

Cat. No.	No. of Wells	Culture Area cm <sup>2</sup>	Working Vol., mL	O.D., L x W, mm	No. per Pack	No. per Case
179820	4	1.9	1	66 x 66	4	120
150239	6	9.6	3	128 x 86	1	75
150200	12	3.5	2	128 x 86	1	75
144530	24	1.9	1	128 x 86	1	75
150787	48	1.1	0.5	128 x 86	1	75



## ► Thermo Scientific Nunc Polycarbonate Membrane Inserts in Multidishes



**Nunc™ Polycarbonate Membrane Inserts in Multidishes are easy to use for cultivation of most cell types, without matrix coating.**

Use for a variety of applications, including transport studies, toxicity studies, chemotaxis studies and electron microscopy.

### details

- Easy cultivation of most cell types without matrix coating
- Perfect for transport studies, toxicity tests, chemotaxis studies and electron microscopy
- Nunclon Delta treated and tested for cell attachment
- Tabs provide better grip and easy handling
- Nontoxic
- Packed in sterile Nunclon™ Delta treated multidishes
- Nonpyrogenic

**Ordering Information:** Packed in resealable bags.

Application Examples	Pore Size, $\mu\text{m}$
<b>Transport Studies:</b> Molecules including hormones and growth factors Drug transport across epithelial (Caco-2) and endothelial barriers Drug transport across brain microvascular endothelial cells	0.4 or 3.0
<b>Chemotaxis studies:</b> Migration of cells including eosinophils, neutrophils and macrophages	3.0 or 8.0
<b>Invasion studies:</b> Tumor invasion and metastasis models Invasion inhibitors Extra cellular matrix effects	3.0 or 8.0
<b>Co-cultivation studies:</b> Cell-cell interaction Cell-matrix interaction Cell-substrate interaction	0.4 or 3.0
<b>Tissue engineering:</b> Angiogenesis Dermal/epidermal and epithelial tissue models	0.4 or 3.0

### Nunc Polycarbonate Membrane Inserts in Multidishes

Cat. No.	For use with	Vol., mL	Culture Area, $\text{cm}^2$	Pore density, pores/ $\text{cm}^2$	Porosity	No. per Pack	No. per Case
140620	Multidish 24	0.5	0.47	$<0.85 \times 10^8$	$<6.8\%$	12	48
140627	Multidish 24	0.5	0.47	$<1.7 \times 10^6$	$<7.7\%$	12	48
140629	Multidish 24	0.5	0.47	$<0.85 \times 10^5$	$<2.7\%$	12	48
140652	Multidish 12	1.1	1.13	$<0.85 \times 10^8$	$<6.8\%$	12	48
140654	Multidish 12	1.1	1.13	$<1.7 \times 10^6$	$<7.7\%$	12	48
140656	Multidish 12	1.1	1.13	$<0.85 \times 10^5$	$<2.7\%$	12	48
140640	Multidish 6	1.5	3.14	$<0.85 \times 10^8$	$<6.8\%$	6	24
140642	Multidish 6	1.5	3.14	$<1.7 \times 10^6$	$<7.7\%$	6	24
140644	Multidish 6	1.5	3.14	$<0.85 \times 10^5$	$<2.7\%$	6	24
140660	Multidish 6	1.75	4.1	$<0.85 \times 10^8$	$<6.8\%$	6	24
140663	Multidish 6	1.75	4.1	$<1.7 \times 10^6$	$<7.7\%$	6	24
140668	Multidish 6	1.75	4.1	$<0.85 \times 10^5$	$<2.7\%$	6	24

\* Suggested working volume, mL = in addition to normal well working volume



## ► Carrier Plates for Cell Culture Inserts

**The Carrier Plate is designed for versatility in your research. The system for manipulating multiple inserts can be used for individual compartment cultures or batch cultures with shared media. Use with up to 12 or 24 inserts at a time and adjust the hanging height, for example, to accommodate the use of more media under cultures at the air-media interface.**

The carriers come in two formats corresponding to Multidish 12 or Multidish 24 for polycarbonate inserts having 0.4, 3.0 or 8.0  $\mu\text{m}$  pore sizes. Allows simultaneous handling of multiple inserts or use inserts individually. Adjustable vertical position of inserts.

### details

- Multidish 12 or 24
- OmniTray or Disposable
- Bio-Assay Dish

### Carrier Plates

Cat. No.	Description	Inserts per plate	Inserts per Case	Pore size, $\mu\text{m}$	Membrane material	Lid	No. per Case
<b>Carrier Plate System for Multidish 12: Non-porygenic, USP Class VI, Sterile, SBS compliant, Alphanumeric identification</b>							
141086	Carrier MD12 (no inserts)	—	—	—	—	Yes	1
141078	Carrier MD12	12	48	0.4	Polycarbonate	Yes	4
141080	Carrier MD12	12	48	3	Polycarbonate	Yes	4
141082	Carrier MD12	12	48	8	Polycarbonate	Yes	4
<b>Carrier Plate System for Multidish 24: Non-porygenic, USP Class VI, Sterile, SBS compliant, Alphanumeric identification</b>							
141008	Carrier MD24 (no inserts)	—	—	—	—	Yes	4
141002	Carrier MD24	24	96	0.4	Polycarbonate	Yes	4
141004	Carrier MD24	24	96	3	Polycarbonate	Yes	4
141006	Carrier MD24	24	96	8	Polycarbonate	Yes	4



## ► Thermo Scientific Nunc Lab-Tek Chamber Slide System



**Nunc™ Lab-Tek™ Chamber Slide System includes a unique removable chamber that enables growth of anchorage dependent cells right on the microscope slide.**

Use the same slide later for staining and microscopic examination.

### details

- Broad range of formats and well numbers to meet your application needs
- Available with a Permanox solvent-resistant plastic slide for adherent cell culture
- Writing surface provides easy identification of samples
- Save time and reagents by growing cells directly on microscope slide
- In 1-, 2-, 4-, 8- and 16-well configurations; all measure 25 × 75 mm
- Medical-grade silicone sealing gasket can be removed for cover slipping
- No cell transfer needed prior to visualization/staining
- Useful for viral and mycoplasma testing, chromosome studies, toxicity tests and immunocytology
- Suitable for use with fluorescent labels
- Sterile

**Certifications:** CE marked.

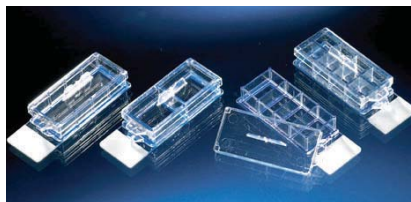
### Nunc Lab-Tek Chamber Slide System

Cat. No.	Material	No. of Wells	Working Vol., mL	No. per Pack	No. per Carton	No. per Case
177372	Glass Chamber Slide System	1	2.5 - 4.5	8	12	64
177380	Glass Chamber Slide System	2	1.2 - 2.0	8	12	64
177399	Glass Chamber Slide System	4	0.5 - 0.9	8	12	64
177402	Glass Chamber Slide System	8	0.2 - 0.4	8	12	64
178599	Glass Chamber Slide System	16	0.1 - 0.2	8	12	64
177410	Permanox Plastic Chamber Slide System	1	2.5 - 4.5	8	12	64
177429	Permanox Plastic Chamber Slide System	2	1.2 - 2.0	8	12	64
177437	Permanox Plastic Chamber Slide System	4	0.5 - 0.9	8	12	64
177445	Permanox Plastic Chamber Slide System	8	0.2 - 0.4	8	12	64
171080	Coverglass for 16 well slide	—	—	—	—	96





## ► Thermo Scientific Nunc Lab-Tek II Chamber Slide System



**Nunc™ Lab-Tek™ II Chamber Slide™ System consists of a removable, polystyrene media chamber attached to a specially treated standard glass microscope slide.**

Use the same slide later for staining and microscopic examination.

Consists of a removable media chamber attached to a standard glass microscope slide (25 × 75 mm) – grow cells directly on slides. Slides are specially treated with a unique RS wash to ensure a consistent growth surface.

### details

- Completely sterile and available in 1-, 2-, 4- or 8-well configurations
- Tabbed cover fits on top of the chamber to allow gas exchange while minimizing evaporation
- Removal tool (included) makes it easy to separate the chamber from slide
- Superfrost™ marking area facilitates labeling
- Non-fluorescent microscope slide, glass with rounded corners
- Biocompatible adhesive
- Inert hydrophobic well border printed on slide
- Treated for excellent attachment and growth of cells
- Slide separator included in each pack
- CE marked

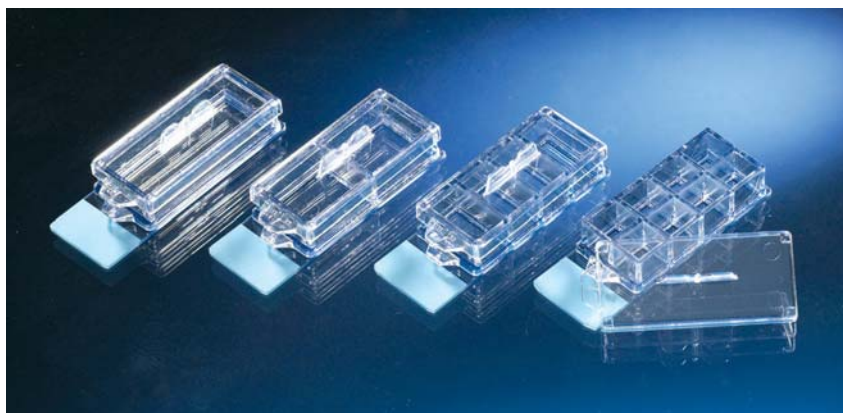
**Includes:** Removal tool.

### Nunc Lab-Tek II Chamber Slide System

Cat. No.	No. of Wells	Culture Area, cm <sup>2</sup>	Suggested Working Vol., mL	No. per Pack	No. per Case
154453	1	8.6	2.0 - 4.5	8	96
154461	2	4	1.0 - 2.0	8	96
154526	4	1.7	0.5 - 1.0	8	96
154534	8	0.7	0.2 - 0.5	8	96



## ► Thermo Scientific Nunc Lab-Tek II CC2 Chamber Slide System



**Nunc™ Lab-Tek™ II CC2™ Chamber Slide™ System** is an enhanced version of the Nunc Lab-Tek II Chamber Slide System – enabling cell growth directly on a glass microscope slide. The CC2 surface mimics PDL coating.

Chemically modified CC2 growth surface mimics biological coatings like polylysine.

### details

- Remains stable and consistent for over one year without refrigeration
- Tabbed cover allows gas exchange while minimizing evaporation
- Sterile
- Removal tool separates chamber from glass
- Provides binding sites optimal for fastidious cells
- Light blue frosted writing area

**Includes:** Removal tool.

**Certifications:** CE Marked.

### Nunc Lab-Tek II CC2 Chamber Slide System

Cat. No.	No. of Wells	Culture Area, cm <sup>2</sup>	Working Vol., mL	No. per Pack	No. per Case
154739	1	8.6	2.0 - 4.5	8	96
154852	2	4.0	1.0 - 2.0	8	96
154917	4	1.7	0.5 - 1.0	8	96
154941	8	0.7	0.2 - 0.5	8	96



## ► Thermo Scientific Nunc Lab-Tek Chambered Coverglass



**Nunc™ Lab-Tek™ Chambered Coverglass includes a thin cover glass that provides the optimum optical characteristics required for high-magnification microscopy and confocal image analysis.**

### details

- Chambered Coverglass is perfect for confocal image analysis
- Optimal for high power inverted microscope viewing
- Non-removable polystyrene media chambers secured to a 1.0 Borosilicate chambered coverglass
- Sterile

**Certifications:** CE marked.

#### Nunc Lab-Tek Chambered Coverglass

Cat. No.	No of Wells	Culture Area, cm <sup>2</sup>	Working Vol., mL	No. per Pack	No. per Case
155361	1	9.4	2.5 - 4.5	8	96
155380	2	4.2	1.2 - 2.0	8	96
155383	4	1.8	0.5 - 0.9	8	96
155411	8	0.8	0.2 - 0.4	8	96

## ► Thermo Scientific Nunc Lab-Tek II Chambered Coverglass



**Nunc™ Lab-Tek™ II Chambered Coverglass includes a thin cover glass that provides the optimum optical characteristics required for high-magnification microscopy and confocal image analysis.**

### details

- Non-removable media chamber securely mounted to extra-thin (No. 1.5) borosilicate coverglass for optimum high-power inverted microscopic viewing
- Gas exchange achieved with minimal evaporation through tabbed polystyrene cover
- For culturing and viewing living cells
- Sterile

**Certifications:** CE marked.

#### Nunc Lab-Tek II Chambered Coverglass

Cat. No.	No. of Wells	Culture Area, cm <sup>2</sup>	Suggested Working Vol., mL	No. per Pack	No. per Case
155360	1	8.6	2.0 - 4.5	8	96
155379	2	4.0	1.0 - 2.0	8	96
155382	4	1.7	0.5 - 1.0	8	96
155409	8	0.7	0.2 - 0.5	8	96



## ► Thermo Scientific Nunc Lab-Tek Flask on Slide



**Nunc™ Flask on Slide is ideal for single-cell autoradiography and single-cell immunofluorescence.**

The flask on slide format allows cell culture directly on a microscope slide.

### details

#### SlideFlask Chamber (shown with black cap in photo)

- Employs tissue culture-treated polystyrene slide attached to 18 × 50 mm flask structure via ultrasonic weld – allowing for long-term, leak-free incubation
- Upper flask structure snaps away easily after culture – freeing slide for microscopic examination
- Nunclon certified
- Available Coverglass (Cat. No. 171862)

#### The Flaskette Chamber (shown with white cap)

- Glass slide with a silicone gasket and a 20 × 50 mm upper flask structure
- Can be sealed to exclude air – useful when embedding cells in resin for electron microscopy
- CE marked

#### Nunc Lab-Tek Flask on Slide

Cat. No.	Description	Culture Area, cm <sup>2</sup>	No. per Pack	No. per Case
170920	SlideFlask Chamber with tissue culture treated polystyrene slide	9.0	5	50
177453	Flaskette Chamber with glass microscope slide	10	8	96
171862	Nunc Coverglass for Flask on Side	na	100	1000

## ► Thermo Scientific Nunc Coverglass for Flask on Slide

**Nunc™ Coverglass for use with SlideFlask.**

### details

- Measures 18 × 50 mm

**Ordering Information:** For use with Flask on Side (Cat. No. 170920)

#### Nunc Coverglass for Flask on Side

Cat. No.	Description	No. per Pack	No. per Case
171862	Coverglass	100	1000



## ► Thermo Scientific Nunc Microscope Slides



**Nunc™ Microscope Slides can be used when cell attachment is not possible on a glass slide.**

### details

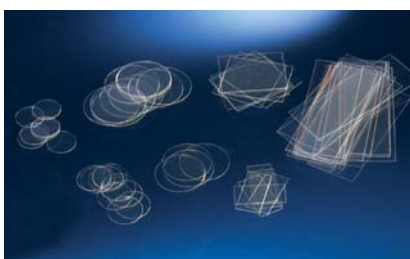
- Corresponds to the surface of most standard tissue culture vessels made of polystyrene
- Surface treatment ensures optimal conditions for cell attachment and growth
- Surface treated to enhance cell attachment and growth
- Sterile

**Ordering Information:** Size: 3 × 1 in. (75 × 27 mm).

### Nunc Microscope Slides

Cat. No.	Material	L x W, mm	No. per Pack	No. per Case
160005	Permanox™ Microscope Slide	75 x 25	20	100
160004	Polystyrene Microscope Slide	75 x 27	20	100

## ► Thermo Scientific Nunc Thermanox Coverslips



**Nunc™ Thermanox™ Coverslips feature a surface treatment on one side for optimal cell attachment and growth.**

### details

- 0.2 mm thickness
- Resistant to commonly used solvents
- Safe and easy to handle
- Autofluorescent in the range 380 to 545 nm
- Surface treatment on one side for optimal cell attachment and growth

### Nunc Thermanox Coverslips

Cat. No.	For use with Nunc product	O.D., mm	Sterile	Availability	No. per Pack	No. per Case
150067	---	24 x 30	Yes	Worldwide	50	500
174969	---	15 dia.	Yes	Worldwide	50	500
174977	---	22 dia.	Yes	Worldwide	50	500
174950	24-well Multidish	13 dia.	Yes	Worldwide	50	500
174985	6-well Multidish	25 dia.	Yes	Worldwide	50	500
174942	4-well Multidish	22 x 66	Yes	Worldwide	50	500
174934	8-well Multidish	10.5 x 22 (rectangular)	Yes	Worldwide	50	500



**Thermo Scientific Products –**  
*meeting the challenges of science and industry*

# sera and media

## Thermo Scientific HyClone Sera and Media

For more than 40 years, we have been steadfast in our commitment to product innovation, quality and the advancement of science through the support of cell culture across academia, research and bioprocessing. As a leading global manufacturer of sera, media and other cell culture reagents, HyClone™ products enable advancements in cell culture that continually expand knowledge and research advancement worldwide.



For more product information, go to:  
**[www.thermoscientific.com/hyclone](http://www.thermoscientific.com/hyclone)**



## ► Thermo Scientific Nunc 15 mL & 50 mL Conical Centrifuge Tubes



**Nunc™ 15 mL and 50 mL Conical Centrifuge Tubes are premium, high-quality conical tubes that are environmentally friendly and offer maximum cleanliness with a recyclable, plastic rack. They provide increased traceability with the largest writing area on the market.**

Nunc conical tubes are constructed of polystyrene and available in a bulk pack or in environmentally-friendly racked configuration.

### details

- Environmentally-friendly recyclable plastic rack reduces waste in the lab
- New plastic rack minimizes risk of contamination and particles and is easy to clean
- Tubes are sterile to  $10^{-6}$  SAL
- Large writing area provides more space for sample traceability
- RCF rating enables greater range of applications from low speed to high speed centrifugation
- USP Class VI, non-pyrogenic, non-cytotoxic and RNase/DNase free to ensure the highest performance
- Leakproof to protect samples



#### Specifications

Material (Tube)	Polypropylene
Material (Cap)	HDPE
Color (Cap)	Blue
Shape	Conical
Sterile	Yes
Writing Area	Yes

#### Nunc 15 mL & 50 mL Conical Sterile Polypropylene Centrifuge Tubes

Cat. No.	Capacity, mL	Packaging	Max RCF, xg tested	No. per Pack	No. per Case
339650	15	Bulk	10,500	50	500
339651	15	Racked	10,500	25	500
339652	50	Bulk	17,000	25	500
339653	50	Racked	17,000	25	300



## ► Thermo Scientific Nunc EZFlip Centrifuge Tubes

conical



**Nunc™ 15 mL and 50 mL EZ Flip Conical Centrifuge Tubes** come in a proprietary hinged-cap tube system with an ergonomic design for one-handed opening and closing.

Integrated leakproof cap prevents cross-contamination and lost closures.

### details

- Conical bottom, sterile
- Clarified polypropylene combines chemical resistance and high-speed tolerances
- Leakproof and airtight to prevent cross contamination
- Use 50 mL tubes up to 9500 xg; 15 mL tubes withstand forces up to 8500 xg
- White writing area and flat caps for sample identification
- Printed volume markings and graduations
- Standard dimensions, compatible with many fixed-angle or bucket rotors

**Ordering Information:** Tubes are sterile and supplied in a bulk pack (sleeve) or a rack.

### Nunc EZFlip Centrifuge Tubes

Cat. No.	Capacity, mL	Packaging	Length, mm (in.)	Vol., oz.	No. per Pack	No. per Case
362694	15	Bulk	121 (4.76)	0.50	50	500
362695	15	Racked	121 (4.76)	0.50	50	500
362696	50	Bulk	115 (4.56)	1.69	25	500
362697	50	Racked	115 (4.56)	1.69	25	500



## ► Thermo Scientific Nunc 200 mL Centrifuge Tube



**Nunc™ 200 mL Centrifuge Tubes** hold 200 mL total volume for larger batches and resist forces to an RCF of 7000.

Thermo Scientific Nunc Labware Products are made from high purity resins, and molded using our state-of-the-art processes. Plastic labware is a safer alternative to glass without sacrificing accuracy.

### details

- Tightness tested
- Fits most centrifuges

**Compliance:** Meet USP Class VI

**Notes:** RCF tested with adaptor 377585.

#### Nunc 200 mL Centrifuge Tube

Cat. No.	Features
376813	Sterile, conical-bottom tube fits most 250 and 500 mL swinging-bucket rotors

## ► Thermo Scientific Nunc Centrifuge Bottle Adapters and Cushions



**Nunc™ Centrifuge Bottle Adapters and Cushions** are tightness-tested, fit most centrifuges, and meet USP Class VI.

Nunc products are high-quality plastics for use in biotechnology, pharmaceutical and research laboratories, as well as in the production of vaccines and diagnostic kits.

### details

- Centrifuge Bottle Adapters/Cushions are required when spinning selected centrifuge bottles

#### Nunc 200 mL Centrifuge Bottle Adapters and Cushions

Cat. No.	Description
377585	Cushion Adapter, Nylon, For 200 mL tubes

## ► Thermo Scientific Nunc Conical Tube Rack



**Nunc™ Conical Tube Rack** fits most centrifuges and is tightness-tested.

### details

- Hold six 200 mL tubes or 20 - 50 mL tubes
- Epoxy/steel or expanded polystyrene foam

**Notes:** Meet USP Class VI

#### Nunc 200 mL Conical Tube Rack

Cat. No.	Description	Holds	No. per Pack	No. per Case
374179	Expanded polystyrene	6 tubes	1	1





## ► Thermo Scientific Nunc Serological Pipets



**Nunc™ Serological Pipets are accurate, disposable plastic pipettes, plugged and sterilized.**

Nunc Cell Culture products offer solutions for cell growth and analysis and have been used by researchers worldwide since 1953. With a wide range of surface areas and treatments, we have products for all your basic or advanced cell-based research.

### details

- Volumes are color-coded for quick size identification and packaging is color-coded for ease in sorting and selecting the correct size
- With both “reverse” and “negative” graduations in easy-to-read black printed scale
- Convenient extra graduations to full pipet volume
- Top ends are beveled with cotton plugging
- Nontoxic, certified non-pyrogenic – suitable for cell culture work
- Bold clear graduations with easy-to-read scale markings
- Individually wrapped in convenient peel-open paper bags
- Printed with black scale
- Polystyrene
- Sterile to SAL (10<sup>-6</sup>)

**Ordering Information:** Supplied sterile, individually-packaged in easy-to-open paper/plastic wrapper.

### Nunc Serological Pipets

Cat. No.	Capacity	Graduation	Neg. Grad	Tolerance	Color Code	No. per Pack
159609	1	0.01	0.3	±0.02	Black	200
159617	2	0.01	0.3	±0.04	Black	125
159625	5	0.1	2	±0.10	Blue	50
159633	10	0.1	3	±0.20	Orange	50
159641	25	0.2	10	±0.50	Red	50
159668	50	0.5	10	±0.75	Purple	25





## ► Thermo Scientific Nunc Cell Scrapers



**Nunc™ Cell Scrapers are non-pyrogenic and sterile. Blade is adjustable for optimal application flexibility.**

Thermo Scientific Nunc Cell Culture products offer solutions for cell growth and analysis and have been used by researchers worldwide since 1953. With a wide range of surface areas and treatments, we have products for all your basic or advanced cell-based research.

### details

- Feature flexible polystyrene handles
- Pre-sterilized and individually wrapped
- Blade Length: 0.66 in. (1.7 cm)
- Cat. No. 179707: for use with 75-175 cm<sup>2</sup> flasks
- Cat. No. 179693: for use with 25-80 cm<sup>2</sup> flasks

### Nunc Cell Scrapers

Cat. No.	For Use with	Blade, L x W, mm	Handle L, cm (in.)
179707	75-175 cm <sup>2</sup> flasks	1.7 x 17.5	32 (12.5)
179693	25-80 cm <sup>2</sup> flasks	1.7 x 15.5	23 (9)



### Caps for Flasks Nunclon Delta

Cat. No.	Closure	Color	For Flasks	Units per Pack	No. per Case
151209	Filter	Blue	25 cm <sup>2</sup>	1	100
151152	Vent/Close	Blue	25 cm <sup>2</sup>	1	100
144458	Vent/Close	Blue	80 cm <sup>2</sup>	1	100
144652	Filter	Blue	80 cm <sup>2</sup>	1	100
147074	Vent/Close	Blue	175 cm <sup>2</sup>	1	100
147104	Filter	Blue	175 cm <sup>2</sup>	1	100

### Caps for Flasks Nunclon Delta

Cat. No.	Closure	Color	For Flasks	Units per Pack	No. per Case
146003	Filter	White	175/185/500 cm <sup>2</sup>	1	100
147074	Vent/Close	Blue	175/185/500 cm <sup>2</sup>	1	100
147104	Filter	Blue	175/185/500 cm <sup>2</sup>	1	100



## diagnostics | 136-159

### The right surface for your assay.

In this section, you will find valuable information about products relating to passive binding surfaces for biomacromolecules, covalent coupling surfaces for smaller biomolecules, and affinity capture surface for affinity-tagged biomolecules. Immunoassay techniques are extremely sensitive and contain detection limits in the range of 10 fmol. In order to obtain accurate and reproducible results, it is essential that you choose the appropriate surface with optimized conditions.

By choosing a Thermo Scientific plate, you benefit from more than 30 years of industry-leading experience in immunoassay plate technology, and a broad range of surfaces and formats to optimize your assay.

► For more information about Thermo Scientific diagnostic solutions visit:

[thermoscientific.com/oemdiagnostic](https://www.thermoscientific.com/oemdiagnostic)

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**surface** matters



## ► Choice of Surface – Surfaces for passive adsorption

Whatever the format chosen, there are a number of choices to be made about the best type of surface for the application. The choice will depend on the assay component to be immobilized.

### Surfaces for passive adsorption

Passive surfaces have a broad range of applications, as they can bind a variety of biomolecules, based on multiple weak molecular interactions forming a stable bond. Passive binding is therefore primarily suited for the immobilization of medium- to large-sized molecules, such as antibodies, which are capable of establishing several contact points. The exact molecular interaction sites are dependent on the specific matching of the biomolecule's properties with the polymer surface. A large variety of biomolecules can be stably immobilized on passive surfaces with good residual activity.

The family of Thermo Scientific passive surfaces vary in their degree of hydrophilicity and are organized into four different sub-groups: hydrophobic, slightly hydrophilic, hydrophilic, and very hydrophilic. A hydrophobic surface functions predominantly via hydrophobic binding. With the increased hydrophilicity caused by the incorporation of oxygen containing functional groups, electrostatic interactions can play a greater role in binding, thus influencing which types of biomolecules will bind strongly to the surface.

#### Hydrophobic

- These surfaces are typically used for the adsorption of hydrophobic molecules such as lipid rich biomolecules.

#### Slightly hydrophilic

- The slight hydrophilicity of these plates enhances their ability to bind a diverse range of biomolecules, including glycoproteins, serum containing samples and amphoteric molecules such as lipopolysaccharides. With these plates non-specific adsorption of serum containing samples are reduced, and this will improve the signal-to-noise (S/N) ratio and consequently, sensitivity levels.

#### Hydrophilic

- Optimized to bind high amounts of IgG (polyclonal), these plates are ideal for antibody sandwich assays (e.g. ELISAs). In addition, they show increased binding of many other proteins and biomolecules that possess hydrophilic/hydrophobic characteristics.

#### Very hydrophilic

- The most hydrophilic in our portfolio will bind many hydrophilic proteins with a high affinity to these plates. Binding does, however, tend to be more pH sensitive.

Table 1, Table 2 and Fig. 1 show the link between the surface and the affinity of the biomolecule.

**Table 1. General guidelines for the selection of passive surfaces for the immobilization of particular biomolecules.**

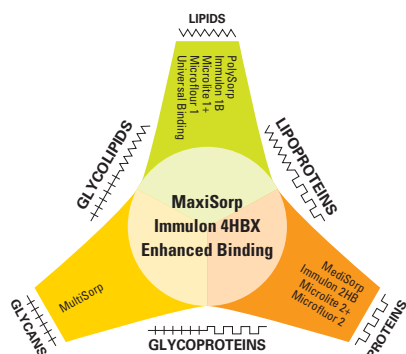
**BIOMOLECULE: The likelihood of effectively immobilizing a biomolecule on a particular surface is indicated in the table**

Passive Category	Surface	Immunoglobulins	Proteins (water soluble)	Proteins (less water soluble)	Glycans
<b>Hydrophobic</b>	PolySorp	Fair	Fair	Very Good	Low
	Immulon 1 B	Fair	Fair	Very Good	Low
	Universal Binding (UB)	Fair	Fair	Very Good	Low
	Microlite 1+	Fair	Fair	Very Good	Low
	Microfluor 1	Fair	Fair	Very Good	Low
<b>Slightly hydrophilic</b>	Immulon 2 HB	Good	Good	Good	Fair
	Microlite 2+	Good	Good	Good	Fair
	Microfluor 2	Good	Good	Good	Fair
	MediSorp	Good	Good	Good	Fair
<b>Hydrophilic</b>	MaxiSorp*	Very Good	Very Good	Fair	Good
	Immulon 4 HBX	Very Good	Very Good	Fair	Good
	Enhanced Binding (EB)	Very Good	Very Good	Fair	Good
<b>Very hydrophilic</b>	MultiSorp	Low	Good	Fair	Good

\* Optimized for IgG binding

## ► Choice of Surface – Surfaces for passive binding

Fig. 1



Surfaces for passive binding

### Surface for passive binding

Schematic representation of the types of biomacromolecules, which can be bound to the available modified surfaces. E.g. if a lipid is to be bound, the hydrophobic surface Thermo Scientific Nunc PolySorp is most suitable. Based on the physiochemical characteristics of the biomolecule to be immobilized, a surface can be chosen which is appropriate for robust binding. As is indicated in Fig. 1, Thermo Scientific Nunc MaxiSorp has the widest breadth applications, as it is capable of binding the greatest range of molecules.

#### Surface characteristics:

- Adsorb larger biomolecules
- Different molecular orientations are possible
- A variety of surfaces are available for performance optimization

Table 2. Passive binding surfaces characteristics

Name	Base Polymer	Hydrophilicity	Binding Preference	Key Applications	Features
○ PolySorp ▲ Immulon 1 B* ▲ Microtiter 1+* ▲ Microfluor 1* ▲ Universal Binding (UB)	Polystyrene	–	Biomolecules that have hydrophobic domains, e.g. lipids, lipoproteins, large proteins	Coated antigen ELISA, FIA, LIA	- Lower binding of immunoglobulins: approx. 200-250 ng IgG/cm <sup>2</sup>
○ MediSorp* ▲ Immulon 2 HB* ▲ Microtiter 2+* ▲ Microfluor 2*	Polystyrene	+	Biomolecules with hydrophilic/hydrophobic properties, e.g. medium to large proteins such as albumin. Amphiphilic biomolecules such as LPS	Antibody sandwich ELISA, coated antigen ELISA	- Binds proteins - Moderate binding of immunoglobulin: MediSorp 500-600 ng IgG/cm <sup>2</sup> Immulon 2 HB 350-450 ng IgG/cm <sup>2</sup> - Lower non-specific binding with samples containing serum or plasma vs. high binding plates
○ MaxiSorp* ▲ Immulon 4 HBX* ▲ Enhanced Binding (EB)*	Polystyrene	++	Biomolecules with hydrophilic/hydrophobic properties. Designed for high binding of IgG. Also high binding for many other proteins and biomolecules that have hydrophilic/hydrophobic character	Antibody sandwich ELISA, FIA, LIA  Coated antigen ELISA, FIA, LIA	- Effectively binds a broad range of proteins and biomolecules (broadest range) - High binding plate. Immunoglobulin capacity: approx. 600-650 ng IgG/cm <sup>2</sup>
○ MultiSorp	Polystyrene	+++	Hydrophilic biomolecules, e.g. glycoproteins	Coated antigen ELISA	- Protein binding is significantly influenced by pH over the range of 4-10. The pH profile should be examined

○ Thermo Scientific Nunc

▲ Thermo Scientific Microtiter

\* Release tested for binding reproducibility.

#### Abbreviations:

FIA - Fluorescent Immunoassay  
 LIA - Luminescent Immunoassay  
 NA - Nucleic Acid

ELISA - Enzyme Linked Immuno Sorbent Assay  
 PCR - Polymerase Chain Reaction  
 LPS - Lipopolysaccharide

EDC - 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide  
 CV - Correlation of variation

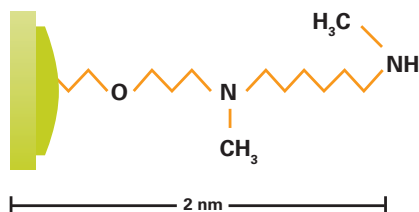




## ► Choice of Surface – Surfaces for covalent binding

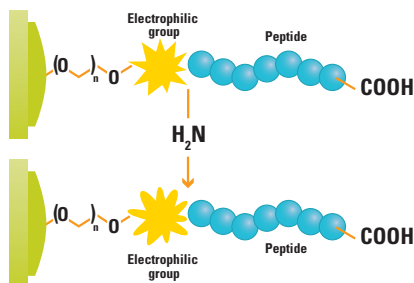
### Surfaces for covalent binding

Covalent coupling, is based on the formation of a single covalent bond between the polymer surface and the biomolecule. Small biomolecules can be immobilized using this technique, as can medium and large molecules that possess the appropriate functional group(s). Since coupling occurs via specific functional groups, biomolecular orientation can also be manipulated by the user.



**Fig. 2**

*Schematic chemical and physical configuration of the CovaLink NH surface. The NH groups are spaced from the polystyrene surface by 2 nm long (approximately), chemically defined spacer arms, covalently anchored to the surface using a patented method.*



**Fig. 3**

*Covalent coupling of a peptide to the Immobilizer Amino plate.*

*During a short incubation step, the peptide will bind to the electrophilic group.*

#### Surface characteristics

- Strong covalent bonds firmly anchor biomolecules
- Compatible with vigorous washing
- Stability is provided
- Coating with lower amounts of reagent may be possible
- Control of molecular orientation

#### Thermo Scientific Nunc CovaLink

- The CovaLink™ surface is designed for coupling of molecules bearing a free carboxyl or phosphate group. Therefore, peptides, haptens and DNA can be coupled. The surface uses a spacer arm to increase accessibility, thereby enhancing overall surface reactivity (Fig. 2).

#### Thermo Scientific Nunc Immobilizer Amino

- The Immobilizer™ Amino surface forms stable covalent bonds between its electrophilic groups and the biomolecule's free amino acids or sulfhydryl groups. Using its unique spacer arm chemistry, the surface provides extremely low non-specific binding to improve assay sensitivity. With no need for an ancillary coupling agent, this surface can simplify your assay development by eliminating the need for a time-consuming blocking step (Fig. 3).

#### The Immobilizer Amino surface is ideal

- If your biomolecule does not bind well to a passive surface, and it possesses one or more free primary amino or sulfhydryl groups (peptides, oligonucleotides, proteins, proteoglycans)
- To obtain a highly sensitive assay with excellent reproducibility and low background
- To minimize the use of a coating reagent
- To reduce the number of steps required to prepare plates
- To avoid unwanted reactivity associated with a blocking reagent

► To help you find the best products for your applications, visit our online plate selection tool at:  
[www.thermoscientific.com/plateguide](http://www.thermoscientific.com/plateguide)

### Covalent coupling surfaces

- The diagram shows the available surface modifications for directed binding of target biomolecules. In the case of Immobilizer Amino and CovaLink, a strong covalent bond is formed with the biomolecule being immobilized at the surface. The biomolecule must possess the correct functional group for covalent coupling. The relevant functional groups on the biomolecule are shown in Fig. 4.

Table 3 shows the link between the surface and the binding preference.

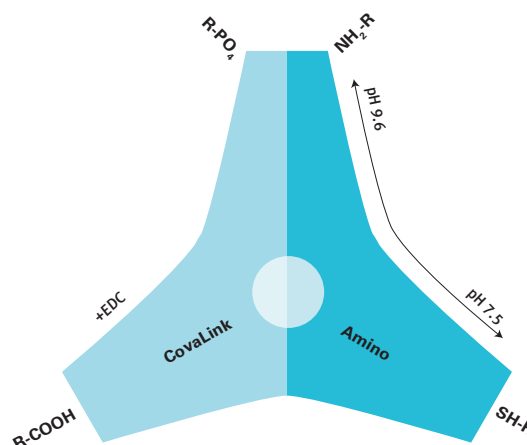




Fig. 4

Table 3. Covalent Coupling Surfaces

Name	Base Polymer	Structure	Binding Preference	Key Applications	Features
 <b>CovaLink</b>	Polystyrene	Secondary Amine on a 2 nm spacer arm	Covalent coupling of biomolecules with -COOH or -PO <sub>4</sub> -groups EDC used for activation of -COOH, PO <sub>4</sub> -groups	Coated antigen ELISA, LIA, FIA	<ul style="list-style-type: none"> <li>- Can link biomolecules via the COOH group (enables the detection of peptides that bind to an antibody via the NH<sub>2</sub> end)</li> <li>- Spacer arm technology for optimal orientation</li> </ul>
 <b>Immobilizer Amino*</b>	Polystyrene	Reactive electrophilic group tethered on a spacer arm	Covalent coupling of biomolecules with free NH <sub>2</sub> and/or SH groups, e.g. proteins, peptides, aminated oligos	Coated antigen ELISA, FIA, LIA NA Hybridization assays Antibody sandwich ELISA, FIA, LIA	<ul style="list-style-type: none"> <li>- Immobilize proteins and peptides that do not bind to passive surfaces</li> <li>- Stable covalent bond formation with free NH<sub>2</sub> or SH groups via spacer arm technology</li> <li>- NO BLOCKING REQUIRED</li> <li>- Simple one step protocol. Add coating solution and incubate</li> <li>- Can frequently reduce the amount of biomolecule needed for coating vs. passive plate</li> <li>- High signal-to-noise ratio</li> </ul>

 Thermo Scientific Nunc

 Thermo Scientific Microtiter

\* Release tested for binding reproducibility.

#### Abbreviations:

FIA - Fluorescent Immunoassay  
LIA - Luminescent Immunoassay

NA - Nucleic Acid

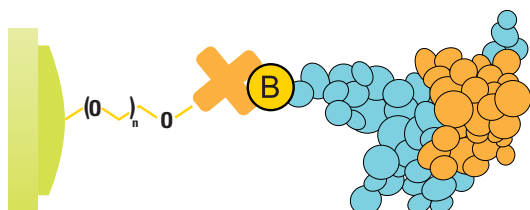
ELISA - Enzyme Linked Immuno Sorbent Assay  
PCR - Polymerase Chain Reaction

LPS - Lipopolysaccharide

EDC - 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide

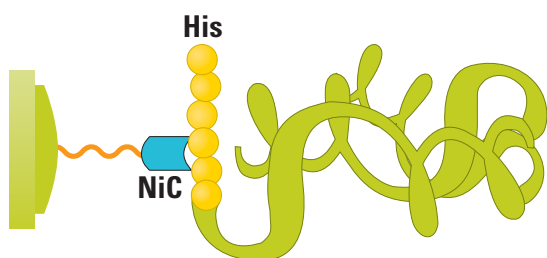
CV - Correlation of variation

## ► Choice of Surface – Affinity capture surfaces



**Fig. 5**

*Coupling of a biotinylated protein to the covalently bound streptavidin. After a pre-wash, simply add the biotinylated target molecule in an appropriate buffer. In a short incubation step, the biotinylated molecule will bind to the streptavidin molecule.*

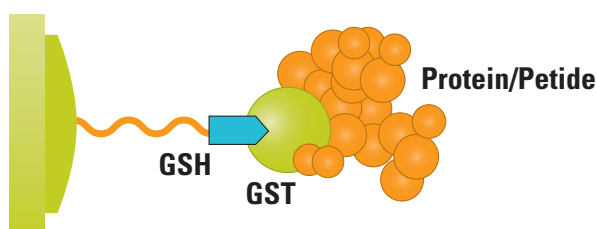


**Fig. 6**

*Coupling of a 6x Histidine-tagged protein/peptide to the Immobilizer Nickel Chelate plate.*

*His = Histidine*

*NiC = Nickel Chelate*



**Fig. 7**

*Coupling of a GST-tagged protein/peptide to the Immobilizer Glutathione plates.*

*GSH = Glutathione*

*GST = Glutathione-S-transferase*

### Affinity capture surfaces

Affinity capture is based on the specific binding of a tagged biomolecule to its receptor. The plate surface is therefore developed with one of the binding pair (the receptor) immobilized on its surface, while the tag is linked to a biomolecule either by chemical coupling or by genetic engineering. The tagged biomolecule can then be captured on the plate surface with a high degree of specificity.

#### Surface characteristics

- Affinity capture surfaces have highly specific binding
- Reduced variability in molecular orientation
- Immobilizer surfaces improve S/N ratios
- Streptavidin biotin interaction can be exploited to immobilize a wide range of biomolecules (proteins, peptides, haptens, nucleic acids)

#### Passive Streptavidin

Streptavidin is passively coated on the plate with a biotin binding capacity of at least 13-20 pmol per well.

#### Immobilizer Streptavidin

The streptavidin protein molecules are covalently bound to the surface via a spacer arm to reduce leaching and enhance precision. The surface is also modified to minimize non-specific binding. As a result, a high S/N ratio is produced, for increased sensitivity. A biotin binding capacity of 20 pmol per well produces excellent analytical results (Fig. 5).

#### Immobilizer Nickel Chelate

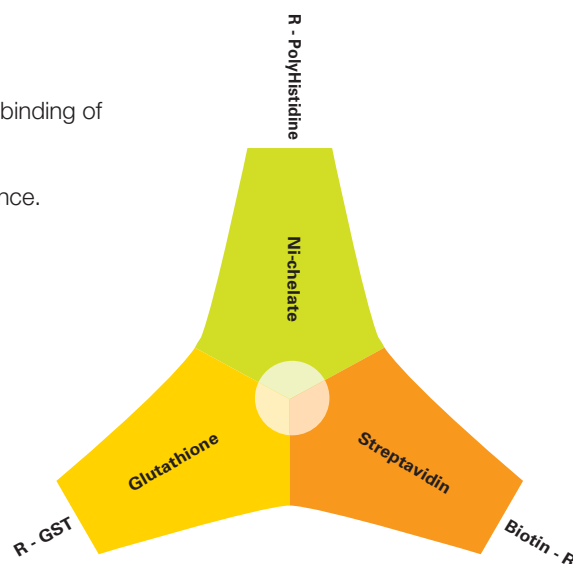
A nickel chelate group is attached to the polymer surface via a spacer arm and will bind polyhistidine, which is typical genetically engineered into a fusion protein. The spacer arm design maximizes the reactivity of the surface, while minimizing non-specific binding, and covalent linkage significantly reduces leaching. The surface does not need to be blocked and therefore produces a high S/N ratio (Fig. 6).

#### Immobilizer Glutathione

A GST peptide, attached to the polymer surface via a spacer arm, will bind glutathione, which is typical genetically engineered into a fusion protein. The spacer arm maximizes surface reactivity while minimizing non-specific binding, and the covalent linkage reduces the occurrence of leaching. The surface does not need to be blocked and therefore a high S/N ratio is obtained (Fig. 7).

The diagram shows the available surface modifications for directed binding of target biomolecules.

Table 4 shows the link between the surface and the binding preference.



**Fig. 8**  
Affinity capture surfaces

**Table 4. Affinity Capture Surfaces**

Name	Base Polymer	Structure	Binding Preference	Key Applications	Features
○ <b>Passively coated Streptavidin</b>	Polystyrene	Streptavidin passively coated	Biotinylated biomolecules	Immunoassays, protein-protein binding assays, PCR ELISA, NA Hybridization assays	- Passively coated Streptavidin - Biotin capacity: $\geq 13$ pmol biotin per well - Stable at room temperature
○ <b>Immobilizer Streptavidin*</b>	Polystyrene	Streptavidin covalently coupled to polystyrene surface via a spacer arm	Biotinylated biomolecules	Immunoassays, protein-protein binding assays, PCR ELISA, NA Hybridization assays	- NO BLOCKING REQUIRED due to unique surface chemistry - High sensitivity; very high signal-to-noise ratio - Stable at room temperature - Biotin capacity (20 pmol/well provides large dynamic range for analytical assays)
○ <b>Immobilizer Nickel Chelate*</b>	Polystyrene	Nickel Chelate covalently coupled to polystyrene surface via a spacer arm	6-His tagged fusion proteins	Protein-protein and protein-nucleic acid binding assays, immunoassays	- High sensitivity; very high signal-to-noise ratio - NO BLOCKING REQUIRED due to unique surface chemistry - Stable at room temperature
○ <b>Immobilizer Glutathione*</b>	Polystyrene	Glutathione covalently coupled to polystyrene surface via a spacer arm	Glutathione-S-transferase tagged fusion proteins	Protein-protein and protein-nucleic acid binding assays, immunoassays	- High sensitivity; very high signal-to-noise ratio - NO BLOCKING REQUIRED due to unique surface chemistry - Stable at room temperature

○ Thermo Scientific Nunc

△ Thermo Scientific Microtiter

\* Release tested for binding reproducibility.

#### Abbreviations:

FIA - Fluorescent Immunoassay

LIA - Luminescent Immunoassay

NA - Nucleic Acid

ELISA - Enzyme Linked Immuno Sorbent Assay

PCR - Polymerase Chain Reaction

LPS - Lipopolysaccharide

EDC - 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide

CV - Correlation of variation



## ► Thermo Scientific Colormetric Assays Using Passive Adsorption

immuno plates, clear



**Nunc™, Immulon™ and Microtiter™ clear plates are ideal for quantitative and qualitative solid phase immunoassays (e.g. ELISA and binding assays).**

They offer four binding surfaces and three well shapes for reliable and reproducible results in colormetric assays. Each lot is functionally tested for IgG binding.

### details

#### 96-Well and 384-Well Solid Plates

- Clear polystyrene
- 3 well shapes available (flat, round or C-shaped)
- Choice of four surfaces for optimal binding
- Alphanumerically labeled rows and columns

#### Surfaces

- PolySorp, Immulon 1B, and Universal Binding (UB) for adsorption of hydrophobic molecules
- MediSorp and Immulon 2HB are slightly hydrophilic and bind a diverse range of biomolecules
- MaxiSorp, Immulon 4 HBX, and Enhanced Binding (EB) are hydrophilic and ideal for antibody sandwich assays
- MultiSorp is very hydrophilic and works well for glycans and water soluble proteins

**Ordering Information:** Please note that availability may vary by country. Cat. Nos. 467320, 456537, 460984, 439454 and 446612 include certificate.

► For additional information about our Plates and Modules, please visit:  
[www.thermo.dirxion.com/immunoassaybrochure](http://www.thermo.dirxion.com/immunoassaybrochure)  
[www.thermo.dirxion.com/immunoassayguide](http://www.thermo.dirxion.com/immunoassayguide)



### Colormetric Assays Using Passive Adsorption

Cat. No.	Brand	Well Shape	Surface	Design	Total Vol., μL	Max Working Vol., μL	Bar Code	No. per Pack	No. per Case
<b>96-well Plates</b>									
475094	Nunc	Flat-bottom	PolySorp	Pinchbar	400	350	No	5	60
456529	Nunc	Flat-bottom	PolySorp	Flange	400	350	No	10	180
446140	Nunc	C-shaped	PolySorp	Pinchbar	350	250	No	5	60
475434	Nunc	Round-bottom	PolySorp	Flange	300	250	No	5	60
3355	Immulon	Flat-bottom	1 B	High Flange	330	280	No	10	50
3555	Immulon	Round-bottom	1 B	High Flange	280	230	No	10	50
9502227	Microtiter	Flat-bottom	UB	High Flange	380	330	No	25	50
95029780*	Microtiter	Flat-bottom	UB	High Flange	380	330	No	1	40
467320***	Nunc	Flat-bottom	MediSorp	Flange	400	350	No	5	60
3455	Immulon	Flat-bottom	2 HB	High Flange	330	280	No	10	50
3655	Immulon	Round-bottom	2 HB	High Flange	280	230	No	10	50
456537***	Nunc	Flat-bottom	MaxiSorp	Flange	400	350	No	10	180
460984***	Nunc	Flat-bottom	MaxiSorp	Flange	400	350	Yes	10	180
439454**, ***	Nunc	Flat-bottom	MaxiSorp	Pinchbar	400	350	No	5	60
442404**	Nunc	Flat-bottom	MaxiSorp	Pinchbar	400	350	No	5	60
430341	Nunc	C-shaped	MaxiSorp	Pinchbar	350	250	No	5	60
446612***	Nunc	C-shaped	MaxiSorp	Pinchbar	350	250	No	5	60
449824	Nunc	Round-bottom	MaxiSorp	Flange	300	250	No	5	60
3855	Immulon	Flat-bottom	4 HBX	High Flange	330	280	No	10	50
95029330	Microtiter	Flat-bottom	EB	High Flange	380	330	No	25	50
467340	Nunc	Flat-bottom	MultiSorp	Flange	400	350	No	5	60
<b>384-Well Plates</b>									
8555	Immulon	Flat-bottom, 384	1 B	High Flange	120	100	No	10	50
464718	Nunc	Flat-bottom, 384	MaxiSorp	Pinchbar	120	100	No	10	30
8755	Immulon	Flat-bottom, 384	4 HBX	High Flange	120	100	No	10	50

\* Sterile with lid

\*\*Sterile version with lid available, min order 30 cases

\*\*\*Certificate included



## ► Thermo Scientific Colormetric Assays Using Passive Adsorption

immuno breakable modules, clear



Our breakable modules come with a choice of four surfaces and a variety of wells and configurations, allowing for optimal choice of products for the specific assay.

They offer lot-to-lot reliability and well-to-well reproducibility. Choose between LockWell, BreakApart and Breakable 1 x 8 modules in standard 96-well frames.

### details

- For solid phase immuno assays (e.g. ELISA)
- Choice of four surfaces for optimal binding
- Free-standing modules are easy to handle
- Alphanumeric system for easy orientation
- Fit standard equipment
- High optical quality for reliable results
- Polystyrene

### Choice of Surface

- PolySorp™, Immulon™ 1B, and Universal Binding (UB) for adsorption of hydrophobic molecules
- MediSorp™ and Immulon 2HB are slightly hydrophilic and bind a diverse range of biomolecules
- MaxiSorp™, Immulon 4 HBX, and Enhanced Binding (EB) are hydrophilic and ideal for antibody sandwich assays
- MultiSorp is very hydrophilic and works well for glycans and water soluble proteins

### Immuno Breakable Modules, Clear

Cat. No.	Brand	Well Design	Surface	Total Vol., $\mu$ L	Max Working Vol., $\mu$ L	Certified	No. per Pack	No. per Case
<b>Framed Modules</b>								
446442	Nunc	C8 LockWell	PolySorp	350	250	No	10	60
446477	Nunc	U8 LockWell	PolySorp	320	250	No	10	60
448496	Nunc	C8 Starwell, LockWell	PolySorp	330	200	No	10	60
473539	Nunc	C8 BreakApart	PolySorp	350	250	No	10	60
95029390	Microtiter	F8 Breakable	UB	400	350	No	25	50
95029430*	Microtiter	U8 Breakable	UB	350	250	No	25	50
446470	Nunc	C8 LockWell	MediSorp	350	250	Yes	10	60
446469	Nunc	C8 LockWell	MaxiSorp	350	250	Yes	10	60
446639	Nunc	U8 LockWell	MaxiSorp	320	250	Yes	10	60
448526	Nunc	C8 Starwell, LockWell	MaxiSorp	320	200	Yes	10	60
473768	Nunc	C8 BreakApart	MaxiSorp	350	250	Yes	10	60
95029180	Microtiter	F8 Breakable	EB	400	350	Yes	25	50
446490	Nunc	C8 LockWell	MultiSorp	350	250	No	10	60

\* Min. order 100 cs.

### Accessories

Cat. No.	Brand	Description	No. per Pack	No. per Case
465404	Nunc	C8 LockWell Frame	10	60
431615	Nunc	C8 BreakApart Frame	5	60
430414	Nunc	BreakApart Push-out Tool	240	240
9503110	Microtiter	Strip Removal Tool	25	25

## ► Thermo Scientific Colormetric Assays Using Passive Adsorption

immuno standard modules, clear



**Nunc™, Immulon™ and Microtiter™ module plates are developed for ELISA techniques and fit standard equipment.**

Their format provides flexible use of components with small sample sizes. The modules offer lot-to-lot reliability, well-to-well reproducibility and are backed by industry-leading quality standards and certifications.

Thermo Scientific standard modules are strip plates with solid modules that can be easily inserted and removed from their frame. This enhances the use of the plate with smaller sample sizes.

### details

- Several strip formats: 8-well strip, 12-well strip, 16-well strip (two columns of 8 wells)
- Several well shapes: flat bottom, C bottom (radius edge), U shape wells, StarWell (wells have fins to increase the surface area and enhance performance)
- Several surfaces to maximize assay performance
- Modules remain in frame when inverted
- Stackable frame marked for lid orientation
- Polystyrene wells in polyethylene frame
- Ext. Dim.: 128 × 86 mm

### Choice of Surface

- PolySorp™, Immulon 1B, and Universal Binding (UB) for adsorption of hydrophobic molecules
- MediSorp™ and Immulon 2HB are slightly hydrophilic and bind a diverse range of biomolecules
- MaxiSorp™, Immulon 4 HBX, and Enhanced Binding (EB) are hydrophilic and ideal for antibody sandwich assays
- MultiSorp is very hydrophilic and works well for glycans and water soluble proteins

**Ordering Information:** Free-standing modules. Frames and modules available separately. Sealing tape and strip caps are available. Color-coded modules are available on request. See your sales representative for additional details.

► To help you find the best products for your applications, visit our online plate selection tool at:  
[www.thermoscientific.com/plateguide](http://www.thermoscientific.com/plateguide)



## ► Thermo Scientific Colormetric Assays Using Passive Adsorption

### Immuno Standard Modules, Clear

Cat. No.	Brand	Well Design	Surface	Total Vol., $\mu$ L	Max Working Vol., $\mu$ L	Certified	No. per Pack	No. per Case
<b>Framed Modules</b>								
467679	Nunc	F16 (2 x 8 wells)	PolySorp	400	350	No	10	60
466966	Nunc	U16 (2 x 8 wells)	PolySorp	300	250	No	10	60
473717	Nunc	C12 (1 x 12 wells)	PolySorp	350	250	No	10	60
469078	Nunc	F8	PolySorp	400	350	No	10	60
444865	Nunc	C8	PolySorp	350	250	No	10	60
475086	Nunc	U8	PolySorp	300	250	No	10	60
441254	Nunc	C8 StarWell	PolySorp	380	250	No	10	60
6505	Immulon	F16 (2 x 8 wells)	1 B	330	280	No	25	100
6310	Immulon	F12	1 B	380	330	No	100	100
95029440*	Microtiter	U8	UB	350	250	No	5	50
467120	Nunc	F8	MediSorp	400	350	Yes	10	60
6506	Immulon	F16 (2 x 8 wells)	2 HB	330	280	No	25	100
6309	Immulon	F12	2 HB	380	330	No	100	100
467466	Nunc	F16 (2 x 8 wells)	MaxiSorp	400	350	Yes	10	60
473709	Nunc	C12 (1 x 12 wells)	MaxiSorp	350	250	Yes	10	60
468667	Nunc	F8	MaxiSorp	400	350	Yes	10	60
434797	Nunc	F8	MaxiSorp	400	350	No	20	120
445101	Nunc	C8	MaxiSorp	350	250	Yes	10	60
475078	Nunc	U8	MaxiSorp	300	250	Yes	10	60
441653	Nunc	C8 StarWell	MaxiSorp	380	250	Yes	10	60
6508	Immulon	F16 (2x8 wells)	4 HBX	330	280	No	25	100
6405	Immulon	F12	4 HBX	380	330	No	100	100
95029100	Microtiter	F8	EB	400	350	No	5	50
467140	Nunc	F8	MultiSorp	400	350	No	10	60
<b>Unframed Modules</b>								
469922	Nunc	F16 (2 x 8 wells)	PolySorp	400	350	No	80	320
469957	Nunc	F8	PolySorp	400	350	No	160	640
469329	Nunc	U16 (2 x 8 wells)	PolySorp	300	250	No	80	320
6301	Immulon	F12	1 B	380	330	No	320	320
6302	Immulon	F12	2 HB	380	330	No	320	320
469914	Nunc	F16 (2 x 8 wells)	MaxiSorp	400	350	Yes	80	320
469949	Nunc	F8	MaxiSorp	400	350	Yes	160	640
469264	Nunc	U16 (2 x 8 wells)	MaxiSorp	300	250	Yes	80	320
6404	Immulon	F12	4 HBX	380	330	No	320	320

\* Min. order 100 cs.

### Frames, Accessories

Cat. No.	Brand	Description	No. per Pack	No. per Case
460348	Nunc	Frame for Nunc modules	5	60
6604	Immulon	Frame for 1 x 12		10
430082	Nunc	8-Well Strip Cap	12	120
430805	Nunc	8-Well Strip Cap, Sterile	12	120
9503110	Microtiter	Strip Removal Tool	25	25

## ► Thermo Scientific Luminescence and Fluorescence Assays Using Passive Adsorption

immuno plates, white and black



**Our white and black plates for quantitative and qualitative immunoassays, including ELISA and binding assays, are compatible with common instruments.**

They offer lot-to-lot reliability and well-to-well reproducibility for optimal results.

### details

- Plate has SBS footprint – fits standard equipment
- Available with flat-bottom or round wells
- Choice of three surface types for optimal binding
- Offered as black or white plates for optimal choice of application type
- Certified binding homogeneity/reproducibility

#### Choice of Surface

- PolySorp™, Microfluor 1, Microfluor 1+ and Universal Binding (UB) for adsorption of hydrophobic molecules
- MaxiSorp™ is hydrophilic and ideal for antibody sandwich assays
- Microfluor 2 and Microlite 2+ are slightly hydrophilic and bind a diverse range of biomolecules

#### White

- Gives maximum reflection
- Minimum autofluorescence and autoluminescence

#### Black

- Minimizes background in fluorescence reading
- Minimizes back-scattered light
- Minimizes crosstalk

**Compatible Products:** Compatible with lids for MicroWell™ plates, sealing tape and breathable membrane.





## ► Thermo Scientific Luminescence and Fluorescence Assays Using Passive Adsorption, continued

### Immuno Plates, White and Black

Cat. No.	Brand	Well Shape	Surface	Application	Total Vol., μL	Max Working Vol., μL	Color	No. per Pack	No. per Case
<b>96-well Plates</b>									
437112	Nunc	Flat-bottom	PolySorp	Fluorescence	400	350	Black	10	80
7605	Immulon	Flat-bottom	Microfluor 1	Fluorescence	330	280	Black	10	50
7705	Immulon	Flat-bottom	Microfluor 1	Fluorescence	330	280	White	10	50
7005	Immulon	Round-bottom	Microfluor 1	Fluorescence	280	230	Black	10	50
6905	Immulon	Round-bottom	Microfluor 1	Fluorescence	280	230	White	10	50
9502867	Microtiter	Flat-bottom RE	UB	Fluorescence	400	350	Black	25	50
95029840*	Microtiter	Flat-bottom	UB	Fluorescence	380	330	Black	1	40
437111	Nunc	Flat-bottom	MaxiSorp	Fluorescence	400	350	Black	10	80
7805	Immulon	Flat-bottom	Microfluor 2	Fluorescence	330	280	Black	10	50
7905	Immulon	Flat-bottom	Microfluor 2	Fluorescence	330	280	White	10	50
7205	Immulon	Round-bottom	Microfluor 2	Fluorescence	280	230	Black	10	50
7105	Immulon	Round-bottom	Microfluor 2	Fluorescence	280	230	White	10	50
7571	Immulon	Flat-bottom	Microlite 1+	Luminescence	330	280	White	10	50
9502887	Microtiter	Flat-bottom	UB	Luminescence	380	330	White	25	50
7572	Immulon	Flat-bottom	Microlite 2+	Luminescence	330	280	White	10	50
436111	Nunc	Flat-bottom	PolySorp	Fluorescence and Luminescence	400	350	White	10	80
436110	Nunc	Flat-bottom	MaxiSorp	Fluorescence and Luminescence	400	350	White	10	80
<b>384-Well Plates</b>									
460518	Nunc	Flat-bottom	MaxiSorp	Fluorescence	120	100	Black	10	30
460372	Nunc	Flat-bottom	MaxiSorp	Fluorescence and Luminescence	120	100	White	10	30

\*Sterile with lid, min. order 100 cases

## ► Thermo Scientific Luminescence and Fluorescence Assays Using Passive Adsorption

immuno breakable modules, white and black



**Thermo Scientific breakable modules for fluorescence and luminescence assays are easy to handle and ensure that each well is kept securely in place.**

The white and black Immuno Breakable Modules are specifically designed for fluorometric and luminometric immunoassays. The unique design offers error-free flexibility; each well locks in the frame and maintains the same height to provide accurate reading and efficient washing.

### details

- High-quality polystyrene wells
- Choice of two passive surfaces to enable assay optimization
- C8 Strips provide flexibility with sample size and optimal washing performance
- Easy to handle; single well held as easily as strips
- Compatible with common instrumentation

#### Choice of Surface

- PolySorp™ and Universal Binding (UB) for adsorption of hydrophobic molecules
- MaxiSorp™ is hydrophilic and ideal for antibody sandwich assays

#### White

- White opaque and reflective surface
- Low cross talk and minimal background

#### Black

- Black opaque and light-absorbing surface
- Minimum cross talk and back-scattered light

### Immuno Breakable Modules, Black and White

Cat. No.	Brand	Well Design	Surface	Total Vol., $\mu$ L	Max Working Vol., $\mu$ L	Application	Color	Certified	No. per Pack	No. per Case
<b>Framed Modules</b>										
446473	Nunc	C8 LockWell	PolySorp	350	250	Fluorescence	Black	Yes	10	60
95029800	Microtiter	F8 RE	UB	400	350	Fluorescence	Black	No	25	50
446471	Nunc	C8 LockWell	MaxiSorp	350	250	Fluorescence	Black	Yes	10	60
463200	Nunc	C8 LockWell	PolySorp	350	250	Luminescence	White	Yes	10	60
463201	Nunc	C8 LockWell	MaxiSorp	350	250	Luminescence	White	Yes	10	60
95029670	Microtiter	F8 RE	UB	400	350	Fluorescence and Luminescence	White	No	25	50

### Accessories

Cat. No.	Brand	Description	No. per Pack	No. per Case
465404	Nunc	C8 LockWell Frame	10	60
9503110	Microtiter	Strip Removal Tool	25	25



**Thermo Scientific Products –**  
*meeting the challenges of science and industry*

# microplate instrumentation

## **The most complete solutions for all of your laboratory needs.**

Thermo Scientific microplate instruments offer precise results and efficient performance, making them ideal for cell biology, molecular biology and immunology applications in the fields of cancer research, drug development, proteomics and genomics.

- Flexible, easy-to-use microplate washers support routine and varied research applications
- A choice of dedicated and multi-technology microplate readers offers a wide variety of applications
- Superior microplate incubator shakers deliver accurate temperature control and efficient orbital shaking
- Designed for ease of use, our microplate dispensers offer high-speed, continuous dispensing of various liquids



For more product information, go to:  
**[www.thermoscientific.com/mpi](http://www.thermoscientific.com/mpi)**

## ► Luminescence and Fluorescence Assays Using Passive Adsorption

immuno standard modules, white and black



**Thermo Scientific white and black standard modules are used for fluorescence and luminescence based immunoassays and binding assays and fit standard equipment.**

They offer reliability and reproducible results and are backed by industry-leading quality standards and certifications.

### details

- Modules are available in 8-, 12- or 16 (2 x 8) well strips either in frames or unframed for choice of optimal assay
- Flat-bottom or C-shaped wells
- Choice of three surface types for optimal binding
- White format gives highest possible signal reflection with low background fluorescence; recommended for epifluorescence
- Black format reduces back scatter light which may be encountered in epifluorescence
- Use transparent or clear format in Time Resolved Fluorescence applications only

### Choice of Surface:

- PolySorp™ and Microlite™ 1+ for adsorption of hydrophobic molecules
- Microlite 2+ is slightly hydrophilic and binds a diverse range of biomolecules
- MaxiSorp™ is hydrophilic and ideal for antibody sandwich assay

### Immuno Standard Modules, White and Black

Cat. No.	Brand	Well Design	Surface	Total Vol., μL	Max Working Vol., μL	Application	Color	Certified	No. per Pack	No. per Case
<b>Framed Modules</b>										
475523	Nunc	F16 (2x8 wells)	PolySorp	400	350	Fluorescence	Black	No	10	60
95029450	Microtiter	F8	UB	380	330	Fluorescence	Black	No	25	50
475515	Nunc	F16 (2x8 wells)	MaxiSorp	400	350	Fluorescence	Black	Yes	10	60
437702	Nunc	C8	PolySorp	350	250	Fluorescence and Luminescence	White	No	10	60
437591	Nunc	C8	MaxiSorp	350	250	Fluorescence and Luminescence	White	Yes	10	60
<b>Unframed Modules</b>										
7566	Immulon	F12	Microlite 1+	380	330	Luminescence	White	No	320	320
7567	Immulon	F12	Microlite 2	380	330	Luminescence	White	No	320	320

### Frames

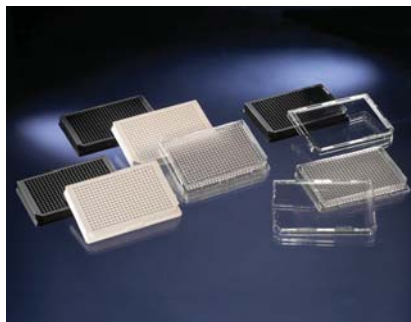
Cat. No.	Brand	Description
6604	Immulon	Frame for 1x12

For Accessories, please see pg. 148 Standard Modules, Clear



## ► Thermo Scientific Covalent and Affinity Binding

immuno specialty surfaces



Nunc™ and Microtiter™ products include plates and modules with surfaces treated for covalent and affinity binding of target biomolecules.

### details

#### Covalent Surfaces (CovaLink and Immobilizer Amino)

- Minimal leaching
- Withstand vigorous washing
- Coating with lower amounts of reagent may be possible
- Control of orientation

#### Affinity Capture Surfaces (Passive Streptavidin and Immobilizer Streptavidin, Nickel Chelate and Glutathione, BioBind)

- Highly specific binding
- Reduced variability in molecular orientation
- Immobilizer surfaces improve signal to noise ratios
- Streptavidin biotin interaction can be exploited to immobilize a wide range of biomolecules

**Compliance:** Immobilizer is a trademark of Exiqon A/S, Vedbaek, Denmark. The product is produced under license from Exiqon A/S and covered by EP 08 20483 and foreign application and patents.



► For additional information about our Plates and Modules, please visit:  
[www.thermo.dirxion.com/immunoassaybrochure](http://www.thermo.dirxion.com/immunoassaybrochure)  
[www.thermo.dirxion.com/immunoassayguide](http://www.thermo.dirxion.com/immunoassayguide)



# Immuno Specialty Surfaces

Cat. No.	Brand	Type	Well Shape	Coating	Total Vol., $\mu$ L	Coated Vol., $\mu$ L	Color	No. per Pack	No. per Case
<b>Covalent Surfaces</b>									
436006	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Amino	400	100	Clear	5	30
436007	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Amino	400	100	White	5	30
436008	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Amino	400	100	Black	5	30
436023	Nunc Immobilizer	LockWell module C8 (x 12) in frame	Round-bottom	Amino	350	100	Clear	5	30
436013	Nunc Immobilizer	Solid module F8 (x12) in frame	Flat-bottom	Amino	400	100	Clear	5	30
436009	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Amino	120	50	Clear	5	30
436012	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Amino	120	50	Black	5	30
244105	Nunc	BreakApart module C8 (x12) in frame	Round-bottom	CovaLink	400	100	Clear	5	30
478042	Nunc	Solid module F8 (x12) in frame	Flat-bottom	CovaLink	400	100	Clear	5	30
479995	Nunc	Frame for CovaLink							
<b>Affinity Surfaces</b>									
236001	Nunc	Solid plate 96-well	Round-bottom	Streptavidin passively coated	350	200	Clear	1	15
236004	Nunc	Solid module C8 (x12) in frame	Round-bottom	Streptavidin passively coated	350	200	Clear	1	15
436014	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Streptavidin covalently coated	400	100	Clear	1	15
436015	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Streptavidin covalently coated	400	100	White	1	15
436016	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Streptavidin covalently coated	400	100	Black	1	15
436020	Nunc Immobilizer	Solid module F8 (x12) in frame	Flat-bottom	Streptavidin covalently coated	400	100	Black	1	15
436022	Nunc Immobilizer	LockWell module C8 (x12) in frame	Round-bottom	Streptavidin covalently coated	350	100	Clear	1	15
436017	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Streptavidin covalently coated	120	50	Clear	1	15
436018	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Streptavidin covalently coated	120	50	White	1	15
436019	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Streptavidin covalently coated	120	50	Black	1	15
95029293	Microtiter BioBind	Breakable module F8 (x12) in frame	Flat-bottom	Streptavidin covalently coated	400	200	Clear	1	5
95029263	Microtiter BioBind	Solid module F8 (x12) in frame	Flat-bottom	Streptavidin covalently coated	400	200	Clear	1	5
436024	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Ni Chelate	400	100	Clear	1	15
436027	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Ni Chelate	400	100	Black	1	15
436028*	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Ni Chelate	120	50	Clear	1	15
436031*	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Ni Chelate	120	50	Black	1	15
436032	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Glutathione	400	100	Clear	1	15
436033	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Glutathione	400	100	White	1	15
436034	Nunc Immobilizer	Solid plate 96-well	Flat-bottom	Glutathione	400	100	Black	1	15
436036*	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Glutathione	120	50	Clear	1	15
436038*	Nunc Immobilizer	Solid plate 384-well	Flat-bottom	Glutathione	120	50	Black	1	15

\* Min order 20 cases



## ► Thermo Scientific Nunc Solid Phase and Liquid Phase Immunoassay Tubes



**Certifications:** MaxiSorp tubes are certified for IgG binding (tube to tube %CV less than 5%).

**Nunc™ Immunoassay Tubes are ideal for ELISA, solid phase RIA and liquid phase RIA.**

These products offer reliability and reproducible results, and are backed by industry-leading quality standards and certifications.

### details

- Offered in choice of three surfaces: MiniSorp™, PolySorp™ and MaxiSorp™ for optimal binding
- Three tube sizes with stoppers available (ordered separately)
- Fit standard equipment

### Choice of Surface

- PolySorp: Hydrophobic surface that preferentially binds biomolecules that have hydrophobic domains
- MaxiSorp: Hydrophilic surface that is optimized for binding IgG and also displays increased binding of many other proteins and biomolecules that possess hydrophilic/hydrophobic character.
- Mini-Sorp: Polyethylene-based material provides low-binding surface

### Liquid Phase Immunoassay Tubes

- MiniSorp surface for low-binding liquid phase immuno assays
- For liquid phase immunoassays, including RIA, for storing of reagents or collecting chromatographic fractions

### Solid Phase Immunoassay Tubes

- PolySorp and MaxiSorp surfaces are available for choice of optimal binding
- For solid phase immuno techniques such as IRMA, ELISA and ILMA
- Certified binding homogeneity
- High-quality polystyrene for optimal quality
- Offered in two designs: StarTube or Standard (smooth); StarTube design provides higher sensitivity and fast assay times

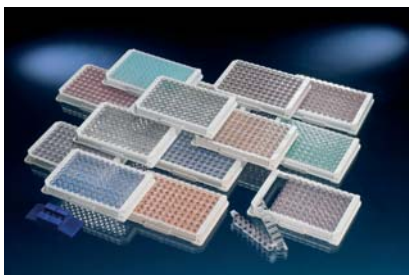
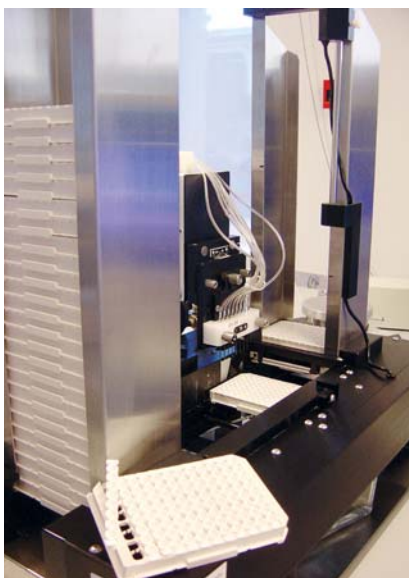
### Immunoassay Tubes

Cat. No.	Brand	Type	Surface	O.D., mm	Total Vol., mL	Graduation Marking, mL	No. per Pack	No. per Case
<b>Liquid Phase</b>								
466982	Nunc-Immuno	Polyethylene Tube	MiniSorp	70 x 11	4.0	2.5	150	3600
443990	Nunc-Immuno	Polyethylene Tube	MiniSorp	75 x 12	5.0	2.5	100	3000
468608	Nunc-Immuno	Polyethylene Tube	MiniSorp	100 x 15	12.0	5 + 10	150	1200
<b>Solid Phase</b>								
476503	Nunc-Immuno	Polystyrene StarTube	PolySorp	75 x 12	5.0		100	3000
470319	Nunc-Immuno	Polystyrene StarTube	MaxiSorp	75 x 12	5.0		100	3000
444474	Nunc-Immuno	Polystyrene Tube	MaxiSorp	70 x 11	4.0		150	1800
444202	Nunc-Immuno	Polystyrene Tube	MaxiSorp	75 x 12	5.0		100	3000

### Stoppers for Immuno Tubes

Cat. No.	Brand	Fits Tubes with O.D., mm	No. per Pack	No. per Case
341866	Nunc-Immuno	11	600	3600
348801	Nunc-Immuno	12	500	3000
343036	Nunc-Immuno	15	300	2400

## ► Custom Capabilities



**Thermo Scientific offerings include a range of customized options to meet your specific application requirements.**

### details

#### Color Coding

We may offer to supply Nunc modules as color coded modules upon request and with a minimum order size. Standard colors are available. For details, please contact your local Nunc brand distributor, or visit [info.nunc@thermofisher.com](mailto:info.nunc@thermofisher.com).

- Standardized to facilitate easy identification of your assays
- Makes it possible to use different colors for patient identification in one frame
- High reliability when working with individual wells

#### Barcoding

For customized products (with a minimum annual quantity), we offer a choice of barcode options. A barcode provides a safe way to keep track of samples and helps reduce human errors. For details, please visit [www.barcodeconfigurator.com](http://www.barcodeconfigurator.com) and contact your local distributor.

- Improved accuracy
- Increased efficiency
- Higher safety levels
- Reduced costs

#### Custom Coating

We offer an extensive knowledge of surface treatment, capabilities and production skills. We can custom coat plates and modules based on custom-specific protocols. Add your reagents, and we provide the final coated plates with consistent, reproducible quality, along with requested documentation. This provides you with the optimal flexibility in your production line. For more information, please visit [www.thermoscientific.com/oemdiagnostics](http://www.thermoscientific.com/oemdiagnostics) and contact your local Nunc brand distributor, or [info.nunc@thermofisher.com](mailto:info.nunc@thermofisher.com).

- LOT reservation service for consistency
- Frees up resources, saves cost and reduces investment
- Leverage proven strengths in surface treatment, surface capability and production

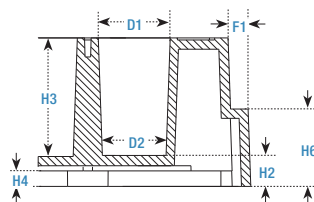


## Well Drawings and Dimensions

- H1 Total height of plate
- H2 Vertical distance from inside well bottom to resting plane
- H3 Inside depth of well
- H4 Vertical distance from external well bottom to resting plane
- H5 Height of flange (short side)
- H6 Height of flange on the long side
- D1 Well diameter, top
- D2 Well diameter, bottom
- F1 Depth of flange

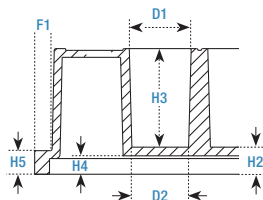
*Note: All dimensions are nominal and in millimeters unless otherwise noted. Also, note that there might be minor dimensional differences between the different molds for the individual plate.*

**F96 MicroWell™ Plates**  
Polystyrene Clear



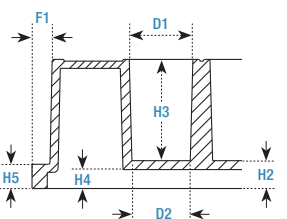
H1	H2	H3	H4	H5	H6	D1	D2	F1
14.4 ± 0.2	3.0	11.4	1.9	2.4	7.4	7.0	6.2	1.7

**F96 MicroWell™ Plates**  
Polystyrene Clear



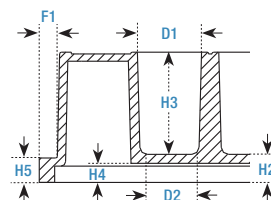
H1	H2	H3	H4	H5	H6	D1	D2	F1
14.5 ± 0.2	3.2	11.2	2.1	2.85 ± 0.15	7.05 ± 0.2	6.5	6.2	1.7

**F96 MicroWell™ Plates**  
Polystyrene Black and White



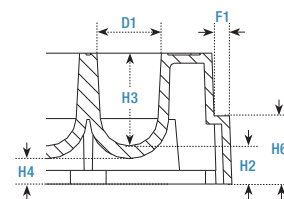
H1	H2	H3	H4	H5	H6	D1	D2	F1
14.6 ± 0.3	3.6	11.2	2.1	2.7		7.05	6.55 ± 0.1	2.0

**C96 MicroWell™ Plates**  
Polystyrene



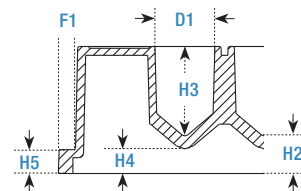
H1	H2	H3	H4	H5	H6	D1	D2	F1
14.0 ± 0.3	3.1	11.0	2.1	2.7		6.6	6.1	1.2

**U96 MicroWell™ Plates**  
Polystyrene Clear



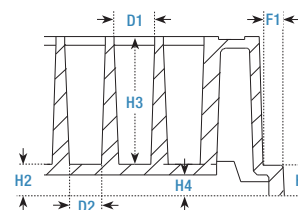
H1	H2	H3	H4	H5	H6	D1	D2	F1
14.5 ± 0.1	4.2	10.2	2.8	2.4	7.5	7.1	Round bottom	1.7

**V96 MicroWell™ Plates**  
Polypropylene



H1	H2	H3	H4	H5	H6	D1	D2	F1
14.4 ± 0.1	4.6	9.8	2.8	2.7		6.7	V-shaped	1.9

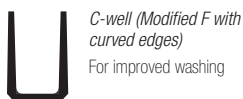
**Immobilizer™ 384-Well Plates**  
Polystyrene



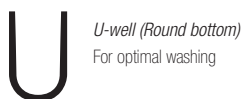
H1	H2	H3	H4	H5	H6	D1	D2	F1
14.4 ± 0.25	2.6	11.7	1.7	2.7		3.7	2.7	1.9



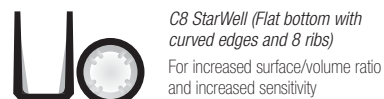
*F-well (Flat bottom)*  
For monochromatic  
reading



*C-well (Modified F with  
curved edges)*  
For improved washing



*U-well (Round bottom)*  
For optimal washing



*C8 StarWell (Flat bottom with  
curved edges and 8 ribs)*  
For increased surface/volume ratio  
and increased sensitivity

## ► Approval Criteria

Thermo Scientific Nunc and Microtiter plate surfaces are release-tested using a binding assay that employs IgG or other appropriate biomolecule (for 96-well solid and module/strip plates).

Name	Surface	Specification
<b>Nunc</b>	MaxiSorp	Clear wells Well-to-well % CV of less than 5% for IgG binding: all results are $\pm 10\%$ from the mean for the lot Black and White wells Well-to-well % CV of less than 10% for IgG binding
	MediSorp	Well-to-well % CV of less than 5% for IgG binding: all results $\pm 10\%$ from the mean for the lot
	Immobilizer Amino	Well-to-well % CV of less than 5% for clear plates Well-to-well % CV of less than 10% for white and black plates
	Immobilizer Streptavidin	Well-to-well % CV of less than 10% for clear plates* Well-to-well % CV of less than 7.5% for white and black plates*
	Immobilizer Glutathione	Well-to-well % CV of less than 5% for clear plates Well-to-well % CV of less than 10% for white and black plate
	Immobilizer Ni Chelate	Well-to-well % CV of less than 5% for clear plates Well-to-well % CV of less than 10% for white and black plates
	Passively coated Streptavidin	Capacity $\geq 13$ pMol Biotin/well (Biotin-HRP)
	CovaLink NH Modules	Well-to-well % CV of less than 10% (clear 96 and strip plate) using a peptide binding assay: results $\pm 15\%$ from the mean for the lot
<b>Microtiter</b>	Immulon 1B Immulon 2HB Microlite 1+, Microlite 2+ Microfluor 1, Microfluor 2	Well-to-well % CV $\leq 8.5\%$ for IgG binding
	Immulon 4HBX	Well-to-well % CV $\leq 5.5\%$ for IgG binding
	Enhanced Binding (EB)	Well-to-well % CV less than 5% for IgG binding

\*QC test of clear plates is based on a biotin binding test (more sensitive than the standard test for white and black plates)





## filtration | 160-193

### The last line of defense against contamination.

For more than 50 years, we've been delivering Thermo Scientific Nalgene filtration products that are optimized for sterility and safety in both research and QC testing processes. Today, you can experience the time-tested, proven quality and security of a full line of Nalgene™ filters, including bottle top filters, analytical QC filters and syringe filters.

#### **Bottle Top Filter Units and Storage Bottles**

Only Nalgene has the unique Rapid-Flow™ membrane support system that uses an evenly-spaced array of columns to provide greater membrane stability – resulting in faster flow and higher throughput of fluids – perfectly suited for sterile filtration and clarification of 50-1000 mL of cell culture media, serum, additives and buffers.

**Analytical QC Test Filter Funnels, Filter Units and Membranes** are ideal for microbiological monitoring and testing of water, food and beverage, raw materials and finished product – offering sterile, disposable filter funnels and the largest choice of reusable filter funnels and bottle top filters made of durable, autoclavable polysulfone plastic.

**Syringe Filters** are available in a wide variety of membranes and sizes for filtration of smaller volumes of aqueous fluids and solvents. See our full range of diameters, membranes, housings and pore sizes – for both sterile and non-sterile offerings – in the Syringe Filters section.

► For more information visit:

[www.thermoscientific.com/filtration](http://www.thermoscientific.com/filtration)

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**quality and** security



## ► Rapid-Flow Selection Guide

Making the Right Selection	
<b>Select the right pore size</b>	<ul style="list-style-type: none"><li>• 0.1 micron for sterile filtration and <i>Mycoplasma</i> removal</li><li>• 0.2 micron for sterile filtration</li><li>• 0.45 micron for clarification</li><li>• 0.8 micron for prefiltration and clarification</li></ul>
<b>Select the right capacity</b>	Choose from 50 mL, 115 mL, 150 mL, 250 mL, 500 mL, 1000 mL capacity filter units and bottle top filters.
<b>Select the right membrane diameter</b>	Options include 50 mm, 75 mm and 90 mm diameter. Wider membranes mean faster flow and more throughput so you don't have to reach for a second filter for difficult-to-filter fluids. Only Nalgene has 90 mm diameter membranes in 500 mL and 1000 mL size filter units and bottle top filters.
<b>Select the right membrane</b>	<ul style="list-style-type: none"><li>• PES (polyethersulfone) is the ultimate cell culture membrane with low protein binding so there is less chance of removing critical protein from your media. It is hydrophilic, so no external wetting agents or surfactants are needed, resulting in low extractables. And, it's fast so you spend less time waiting.</li><li>• SFCA (surfactant-free cellulose acetate) contains none of the wetting agents found in standard CA (cellulose acetate), and also has lower protein binding than standard CA. If you use CA for media filtration you owe it to your cell lines to switch to SFCA; It's only available in Nalgene filter units and bottle top filters.</li><li>• CN (cellulose acetate) is ideal for filtering water, buffers and other aqueous solutions when protein binding is not a concern or if you want to remove extraneous protein.</li><li>• NYL (nylon) membranes are tough, alcohol resistant and have low levels of extractables. Choose them for filtering alcoholic solutions.</li></ul>
<b>Select the right media storage bottle</b>	Nalgene storage bottle cap design prevents gas exchange and maintains pH of stored media for up to two weeks. Nalgene storage bottles are available in 150, 250, 500 and 1000 mL sizes, separately or as an integral part of all Nalgene filter units.
<b>Select the right quality</b>	Every lot is Nalgene-Certified to be sterile, non-cytotoxic, non-pyrogenic, and to have passed strict performance tests. We guarantee it!

## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units PES Membrane



**Nalgene™ Rapid-Flow disposable Filter Units with PES (polyethersulfone) membrane provide the last line of defense against cell culture contamination.**

Low protein binding PES membranes with low extractables are the best choice for sterile filtration of cell culture media, serum, additives and buffers. Asymmetric PES membranes and exclusive Rapid-Flow support plate design provide fast flow rates and high throughput for increased filtration efficiency.

### details

- Filter cup unscrews from storage bottle for easy access to filtrate
- Leakproof† (except 115 mL sizes) screw cap closure eliminates pH shift in storage bottle for longer life of stored media
- Upper chamber of filter units is clearly marked with pore size, membrane type, catalog number, lot number and expiration date (except 115 mL size)
- Padless membrane support minimizes foaming of proteinaceous samples
- Non-pyrogenic and non-cytotoxic
- PES membrane with blue collar
- Gamma radiation-sterilized and individually bagged for a 5-year sterile shelf life

### Polyethersulfone (PES) Membrane

- PES is the best membrane for cell culture fluids; lowest protein binding to maintain protein balance, lowest extractables to maintain media purity
- Asymmetric PES membrane plus unique Rapid-Flow support plate design provides fast flow and high throughput of fluids for increased filtration efficiency
- 0.2  $\mu\text{m}$  units protect against bacterial contamination
- 0.1  $\mu\text{m}$  units also protect against Mycoplasma contamination

### 115 mL Sizes

- Compact filter units for quick filtration of 50-100 mL of fluid
- Unitary construction with non-separable upper and lower compartments
- Not intended for post-filtration storage of media (use Rapid-Flow products if media storage is required)

**Includes:** Polystyrene cover; graduated upper chamber and storage bottle (except 115 mL size); integral membrane filter; cellulosic-plugged side arm; quick-disconnect tubing adapter.

*† The term "leakproof" applies to Thermo Scientific Nalgene products that meet the following criteria: a) Bottle/flask/funnel closure systems with closures smaller than 100 mm, after they are filled with water, inverted, withstand air pressure of 2psig for 2 minutes, and no water escapes; b) Bottle/funnel/flask closure systems of larger than 100 mm after they are filled with water, inverted for 15 minutes, and no water escapes. Note: these tests, using other liquids, may not yield the same results. To ensure safe usage, customers are advised to test Thermo Scientific Nalgene bottles and closures under conditions of their planned applications. Thermo Scientific Nalgene products are leakproof at ambient temperature and pressure when used with their Nalgene closures.*





## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units

### PES Membrane, continued

Nalgene™ Rapid-Flow Sterile Disposable Filter Units

Cat. No.	Capacity, Upper/Storage Bottle, mL	Material (Membrane)	Pore Size, $\mu\text{m}$	Membrane Dia., mm	No. per Case
565-0010	150/150	PES	0.1	50	12
568-0010	250/250	PES	0.1	50	12
566-0010	500/500	PES	0.1	75	12
567-0010	1000/1000	PES	0.1	90	12
564-0020	150/50	PES	0.2	50	12
524-0020*	115/115	PES	0.2	50	72
565-0020	150/150	PES	0.2	50	12
568-0020	250/250	PES	0.2	50	12
566-0020	500/500	PES	0.2	75	12
569-0020	500/500	PES	0.2	90	12
567-0020	1000/1000	PES	0.2	90	12
124-0045*	115/115	PES	0.45	50	72
165-0045	150/150	PES	0.45	50	12
168-0045	250/250	PES	0.45	50	12
166-0045	500/500	PES	0.45	75	12
169-0045	500/500	PES	0.45	90	12
167-0045	1000/1000	PES	0.45	90	12

\* 115 mL sizes do not have Rapid-Flow support plate design



## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Bottle Top Filters PES Membrane



**Nalgene™ MF75 disposable Bottle Top Filters with PES (polyethersulfone) membrane provide the last line of defense against cell culture contamination.**

Low protein binding PES membranes with low extractables are the best choice for sterile filtration of cell culture media, serum, additives and buffers. Asymmetric PES membranes and exclusive Rapid-Flow support plate design provide fast flow rates and high throughput for increased filtration efficiency.

### details

- Filters marked with catalog number, membrane type and pore size, lot number and expiration date for easy traceability
- Gamma radiation sterilized and individually bagged for a 5-year sterile shelf life
- Molded-in graduations for easy visualization of sample size
- Side-arm with quick-disconnect tubing adapter for easy change between filters
- Use with Nalgene storage bottles with catalog numbers starting with 455- or glass bottles rated for vacuum
- Non-cytotoxic and non-pyrogenic

### Polyethersulfone (PES) membranes

- PES is the best membrane for cell culture fluids; lowest protein binding to maintain protein balance, lowest extractables to maintain media purity
- Asymmetric PES membrane plus unique Rapid-Flow support plate design provide fast flow and high throughput of fluids for increased filtration efficiency
- Use 0.2 µm membranes for sterile filtration, 0.45 µm membranes for fluid clarification and particle removal

**Includes:** Polystyrene graduated chamber; Blue color-coded collar with cellulosic vent plug side arm and quick-disconnect tubing adapter; 50, 75, or 90 mm diameter membranes; bottom screw threads for attachment to bottles with 33 or 45 mm neck sizes.

*CAUTION: Use only sterile bottles designed for use with vacuum. Always use safety shield during vacuum procedures.*

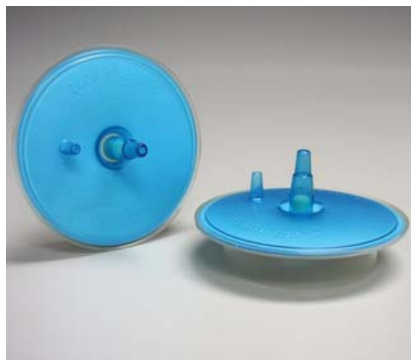
### Nalgene Rapid-Flow Sterile Disposable Bottle-Top Filters

Cat. No.	Capacity, mL	Type	Membrane Dia., mm	Pore Size, µm	Fits Bottle Neck Size, mm	No. per Case
596-3320	150	PES	50	0.2	33	12
596-4520	150	PES	50	0.2	45	12
296-3345	150	PES	50	0.45	33	12
296-4545	150	PES	50	0.45	45	12
595-3320	500	PES	75	0.2	33	12
595-4520	500	PES	75	0.2	45	12
295-3345	500	PES	75	0.45	33	12
295-4545	500	PES	75	0.45	45	12
597-3320	1000	PES	90	0.2	33	12
597-4520	1000	PES	90	0.2	45	12



## ► Thermo Scientific Nalgene Large-Volume FastCap Bottle Top Filter

0.2 µm PES membrane



**Nalgene™ Large-Volume FastCap™ Bottle Top Filter is easy to use – just place on bottle mouth, apply vacuum and start filtering.**

FastCap Bottle Top Filters are for filtration of up to 5 liters of fluid.

### details

- PES membrane for fast flow and high throughput
- Fits bottle necks up to 53 mm diameter
- Filter up to 5 L
- Blue, polystyrene housing

*CAUTION: Use only sterile bottles designed for use with vacuum. Always use safety shield during vacuum process.*

### Nalgene Large-Volume FastCap Bottle Top Filter

Cat. No.	Membrane, µm	Max Throughput, L	Outside Dia., mm	Sterile	Units per Case
298-9020	PES, 0.2	5	90	Yes	10



## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units SFCA Membrane



**Nalgene™ Rapid-Flow™ Sterile Disposable Filter Units with SFCA Membrane are ideal for vacuum filtration and single-use biological work requiring sterile filtration, prefiltration or clarification of aqueous solutions in the lab or field.**

Surfactant-Free Cellulose Acetate (SFCA) membranes have lower extractables than standard (CA) membranes. If you use cellulose acetate (CA) for filtration of media or other cell culture fluids, you owe it to your cells to switch to cleaner, safer Nalgene SFCA.

### details

- Nalgene Rapid-Flow membrane support system provides fast flow and high throughput
- Upper chamber separates from storage bottle for easy access to filtrate
- Leakproof† (except 115 mL sizes) crew cap eliminates pH shift in storage bottle to provide longer life for stored media
- Upper chamber of filter units is clearly marked with pore size, membrane type, catalog number, lot number and expiration date (except 115 mL size)
- Padless membrane support minimizes foaming of proteinaceous samples
- Non-pyrogenic and non-cytotoxic
- Yellow collar for easy identification of SFCA membrane
- Gamma radiation-sterilized and individually bagged for a 5-year sterile shelf life

### Surfactant-free cellulose acetate membranes (SFCA)

- Low protein binding, excellent flow rates, little or no loss of specific proteins
- No wetting agents to affect sensitive cell culture lines
- Much lower extractables than standard CA membranes makes SFCA a better choice for cell culture

### 115 mL sizes

- Compact filter units for quick filtration of 50-100 mL of fluid
- Unitary construction with non-separable upper and lower compartments
- Not intended for post-filtration storage of media (use Rapid-Flow products if media storage is required)

**Includes:** Polystyrene cover; graduated upper chamber and storage bottle (except 115 mL size; integral membrane filter; cellulosic-plugged side arm; quick disconnect tubing adapter.



## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units

### SFCA Membrane, continued

**Nalgene™ Rapid-Flow Sterile Disposable Filter Units**

Cat. No.	Capacity, Upper/Receiver Bottle, mL	Membrane	Pore Size, $\mu\text{m}$	Membrane Dia., mm	No. per Case
122-0020*	115/115	SFCA	0.2	50	72
155-0020	150/150	SFCA	0.2	50	12
157-0020	250/250	SFCA	0.2	50	12
156-4020	500/500	SFCA	0.2	75	12
158-0020	500/1000	SFCA	0.2	75	12
162-0020	500/500	SFCA	0.2	90	12
161-0020	1000/1000	SFCA	0.2	90	12
122-0045*	115/115	SFCA	0.45	50	72
155-0045	150/150	SFCA	0.45	50	12
157-0045	250/250	SFCA	0.45	50	12
158-0045	500/1000	SFCA	0.45	75	12
156-4045	500/500	SFCA	0.45	75	12
162-0045	500/500	SFCA	0.45	90	12
161-0045	1000/1000	SFCA	0.45	90	12

\* 115 mL sizes do not have Rapid-Flow support plate design

## ► Nalgene Rapid-Flow Sterile Disposable Bottle Top Filters

### SFCA Membrane



**Nalgene™ Rapid-Flow™ Sterile Disposable Bottle-Top Filters fit Nalgene filter receiver bottles (#455-series) or standard glass media bottles.**

Surfactant-Free Cellulose Acetate (SFCA) membranes have lower extractables than standard cellulose acetate (CN) membranes. If you use CA for filtration of media or other cell culture fluids, you owe it to your cells to switch to cleaner, safer Nalgene SFCA.

#### details

- Nalgene Rapid-Flow membrane support system provides fast flow and high throughput
- Filters marked with catalog number, membrane type and pore size, lot number and expiration date for easy traceability
- Gamma radiation sterilized and individually bagged for 5-year sterile shelf life
- Molded-in graduations for quick visualization of sample volume
- Side-arm with quick-disconnect tubing adapter for easy bottle top changes
- Non-cytotoxic and non-pyrogenic

#### Surfactant-free cellulose acetate membranes (SFCA)

- Low protein binding, excellent flow rates, little or no loss of specific proteins
- No wetting agents to affect sensitive cell culture lines
- Much lower extractables than standard CA membranes makes SFCA a better choice for cell culture

**Includes:** Polystyrene graduated chamber; color-coded collar with cellulosic vent plug side arm and quick-disconnect tubing adapter; 50, 75, or 90 mm diameter membranes; bottom screw threads for attachment to bottles with 33 or 45 mm neck sizes.

#### Nalgene Rapid-Flow Sterile Disposable Bottle Top Filters

Cat. No.	Capacity, mL	Fits Bottle Neck Size, mm	Membrane	Pore Size, µm	Membrane Dia., mm	No. per Case
290-3320	150	33	SFCA	0.2	50	12
290-3345	150	33	SFCA	0.45	50	12
290-4520	150	45	SFCA	0.2	50	12
290-4545	150	45	SFCA	0.45	50	12
291-3320	500	33	SFCA	0.2	75	12
291-3345	500	33	SFCA	0.45	75	12
291-4520	500	45	SFCA	0.2	75	12
291-4545	500	45	SFCA	0.45	75	12
292-3320	1000	33	SFCA	0.2	90	12
292-4520	1000	45	SFCA	0.2	90	12





## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units CN Membrane



**Nalgene™ Rapid-Flow Sterile Disposable Filter Units with CN (Cellulose Nitrate) membrane are ideal for sterile filtration, prefiltration or clarification of buffers and other aqueous solutions when protein binding is not a concern.**

Nalgene CN membranes are Triton™-free

### details

- Nalgene Rapid-Flow membrane support system provides fast flow and high throughput
- Upper chamber separates from storage bottle for easy access to filtrate
- Leakproof<sup>†</sup> screw cap eliminates pH shift in storage bottle to provide longer life for stored media
- Upper chamber of filter units is clearly marked with pore size, membrane type, catalog number, lot number and expiration date for traceability
- Padless membrane support minimizes foaming of proteinaceous samples
- Non-pyrogenic and non-cytogenic
- Green collar for easy identification of CN membrane
- Gamma radiation-sterilized and individually wrapped for a 5-year sterile shelf life

### 115 mL Sizes

- Compact filter units for quick filtration of 50 to 100 mL of fluid
- Unitary construction with non-separable upper and receiver components
- Not intended for post-filtration storage of media (use Rapid-Flow products if media storage is required)



**Includes:** 50 or 75 mm diameter membrane, polyethylene adapter, and quick-disconnect tubing adapter. Each pack of 500 and 1000 mL units includes 12 glass fiber prefilters. All sizes except 115 mL supplied with sterile polyethylene leakproof<sup>†</sup> cap.

*Notes: CN membranes are best used for filtration of buffers and general lab solutions. We do not recommend CN for filtration of cell culture fluids because it has high protein binding characteristics. Use PES or SFCA for cell culture media, serum, additives, etc.*



## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units CN Membrane, continued

sterile disposable filter units – CN membrane

Nalgene™ Rapid-Flow Sterile Disposable Filter Units

Cat. No.	Capacity, Upper/ Receiver Bottle, mL	Membrane	Pore Size, $\mu$ m	Membrane Dia., mm	Membrane Color/Grid	No. per Case
121-0020*	115/115	CN	0.2	50	White/Plain Grid	72
121-0045*	115/115	CN	0.45	50	White/Black Grid	72
125-0020	150/150	CN	0.2	50	White/None	12
125-0045	150/150	CN	0.45	50	White/Black Grid	12
125-0080	150/150	CN	0.8	50	White/None	12
126-0020	250/250	CN	0.2	50	White/None	12
126-0045	250/250	CN	0.45	50	White/Black Grid	12
126-0080	250/250	CN	0.8	50	White/None	12
450-0020	500/500	CN	0.2	75	White/None	12
450-0045	500/500	CN	0.45	75	White/Black Grid	12
450-0080	500/500	CN	0.8	75	White/None	12
127-0020	500/1000	CN	0.2	75	White/None	12
127-0045	500/1000	CN	0.45	75	White/Black Grid	12
127-0080	500/1000	CN	0.8	75	White/None	12

\* 115 mL sizes do not have Rapid-Flow support plate design



## ► Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units Nylon Membrane



**Nalgene™ Rapid-Flow™ Sterile Disposable Filter Units with Nylon Membrane are recommended for use with solutions where very low extractables are desired, or for filtration of solutions containing weak solvents such as alcohols.**

### details

- Nalgene Rapid-Flow membrane support system provides fast flow and high throughput
- Upper chamber separates from storage bottle for easy access to filtrate
- Leakproof<sup>†</sup> screw cap eliminates pH shift in storage bottle to ensure longer life of stored media
- Upper chamber of filter units is clearly marked with pore size, membrane type, catalog number, lot number and expiration date for traceability
- Padless membrane support minimizes foaming of proteinaceous samples
- Non-pyrogenic and non-cytotoxic
- Gamma radiation-sterilized and individually bagged for a 5-year sterile shelf life

### Nylon Membrane

- Low extractables and naturally hydrophilic
- Contains no wetting agents and is alcohol resistant
- Red collar for easy identification of nylon membrane

**Includes:** Polystyrene cover; graduated upper chamber and storage bottle; integral membrane filter; cellulosic-plugged side arm; quick-disconnect tubing adapter.

### Nalgene Rapid-Flow Sterile Disposable Filter Units

Cat. No.	Capacity, Upper/ Receiver Bottle, mL	Membrane	Membrane dia.	Pore Size, $\mu\text{m}$	No. per Case
150-0020	150/150	Nylon	50	0.2	12
150-0045	150/150	Nylon	50	0.45	12
153-0020	250/250	Nylon	50	0.2	12
153-0045	250/250	Nylon	50	0.45	12
151-4020	500/500	Nylon	75	0.2	12
151-4045	500/500	Nylon	75	0.45	12
154-0020	500/1000	Nylon	75	0.2	12
154-0045	500/1000	Nylon	75	0.45	12
163-0020	500/500	Nylon	90	0.2	12
164-0020	1000/1000	Nylon	90	0.2	12



## ► Thermo Scientific Nalgene Rapid-Flow Sterile Filter Storage Bottles



**Nalgene™ Rapid-Flow™ Sterile Filter Storage Bottles are radiation-sterilized to save you time and minimize contamination.**

Use with Nalgene Bottle-Top Filters, or as replacements or extra receptacles for Nalgene Tissue Culture and Sterilization Filter Units. Excellent as handy sterile single-use storage containers.

### details

- Headspace allows extra serum or other additives to be added to the filtrate
- Leakproof<sup>†</sup> screw caps to eliminate pH shift in bottle for longer life of stored media
- Sterilized by gamma radiation and individually bagged for a 5-year sterile shelf life
- Non-pyrogenic and non-cytotoxic

### Nalgene Rapid-Flow Series Sterile Filter Storage Bottles

Cat. No.	Storage Bottle Capacity, mL	No. per Case
455-0150	150	24
455-0250	250	24
455-0500	500	12
455-1000	1000	12



## ► Thermo Scientific Nalgene Sterile Analytical Filter Units



**Nalgene™ Sterile Analytical Filter Units are complete filter units with an easily removable upper and filter membrane.**

These filter units are designed for efficient recovery and growth of microorganisms for QC testing and analysis of water, food and beverage, raw materials and finished product.

### details

- Upper chamber snaps away from receiver for retrieval of membrane with sterile forceps
- Gamma-sterilized, individually wrapped
- Provides excellent recovery and growth of microorganisms
- Receiver is graduated from 20 to 150 mL for easy reading of sample volume
- Wide base is stable on the bench
- 0.2  $\mu\text{m}$  size is ideal for sterility tests
- 0.45  $\mu\text{m}$  size has black grid to facilitate colony counting
- 0.45  $\mu\text{m}$  membrane is certified for water quality work

**Includes:** Polystyrene cover; upper chamber with reference mark at 100 mL and receiver; removable, 47 mm cellulose nitrate (CN) membranes; cellulosic support pad; cellulosic vent plug side arm; quick-disconnect tubing adapter; and blue support plate.

**Compliance:** 0.45  $\mu\text{m}$  size conforms to Standard Methods. EPA certification sheets included.

### Nalgene Sterile Analytical Filter Units

Cat. No.	Capacity, mL	Pore Size, $\mu\text{m}$	Membrane Color/Grid	Membrane	No. per Pack	No. per Case
130-4020	150	0.2	White/None	CN	12	72
130-4045	150	0.45	White/Black	CN	12	72





► Thermo Scientific Nalgene Sterile Analytical Filter Funnel



**Nalgene™ Analytical Filter Funnel is particularly useful for large-volume microbiological QC samples.**

The convenient snap away design provides easy membrane retrieval for growth and analysis. Compatible with filter manifolds and filtering flasks.

details

- Disposable, presterilized funnel
- Removable 47 mm diameter membrane
- 0.45 µm cellulose nitrate (CN) membrane with black grid is certified for water quality work
- Gamma-sterilized, individually sealed in plastic bag

**Includes:** Upper chamber with reference mark at 150 mL; polystyrene cover; CN membrane; support pad; polystyrene support plate/funnel that fits a stopper or adapter with 9/16 in. hole; quick-disconnect adapter for 1/4 or 5/16 in. tubing. Each pack of 12 funnels includes one vacuum gasket that replaces stopper or adapter with 9/16 in. or larger opening.

**Compliance:** Membrane conforms to APHA Standard Methods. Meets EPA requirements for water quality work.

Nalgene Sterile Analytical Filter Funnel

Cat. No.	Capacity, mL	Pore Size, µm	Membrane Color/Grid	Membrane	No. per Pack	No. per Case
140-4045	150	0.45	White/Black Grid	Cellulose Nitrate	12	72



## ► Thermo Scientific Nalgene Sterile Analytical Test Filter Funnels



**Nalgene™ Sterile Analytical Test Filter Funnels** are economical, sterile disposable funnels for microbiological QC testing and analysis of water, food/beverage, raw material and finished product.

The squeeze and twist funnel is easy to remove for retrieval of the cellulose nitrate (CN) membrane.

### details

- High-impact polystyrene collars are rugged for reliable performance
- Preassembled, sterile, individually bagged to ensure sample integrity
- Adapters accommodate No. 8 stoppers for use with vacuum manifolds or filter flasks
- Designed for single use only
- 47 mm diameter cellulose nitrate membrane is certified for water quality work
- 250 mL sizes are useful when testing beverages that may foam
- Cat. No. 147-0045 features gray membrane that turns black when wet, making it easier to detect and count growing colonies

**Includes:** Six funnel adapters with each case.

**Compliance:** Meets requirements of APHA Standard Methods and EPA requirements for water quality work.

### Nalgene Analytical Test Filter Funnels

Cat. No.	Capacity, mL	Membrane	Membrane Color	Holds Funnel, mL	Pore Size, $\mu\text{m}$	No. per Case
145-0020	100	CN	White	100	0.2	50
145-0045	100	CN	White with black grid	100	0.45	50
147-0045	100	CN	Gray with black grid	100	0.45	50
145-2020	250	CN	White	250	0.2	50
145-2045	250	CN	White with black grid	250	0.45	50

## ► Thermo Scientific Nalgene Reusable Filter Holders with Storage Bottle



**Nalgene™ Reusable Filter Holders with Storage Bottle are complete systems that eliminate the need for a manifold or breakable glass vacuum flask.**

These reusable filter holders are made of washable, autoclavable polysulfone and provide an environmentally friendly alternative to disposable filters.

### details

- Graduated receiver to allow easy visualization of sample volume
- Two side arms allow connection to vacuum line
- Accepts 1/4 to 5/16 in. I.D. (6.4 to 8 mm) vacuum tubing
- Also accepts syringe filters
- Fully autoclavable, with or without membranes in place
- Upper chamber is designed for pressure or vacuum filtration
- Independent locking rings seal upper chamber to receiver without damaging membrane to ensure efficient filtration
- Chamber accommodates 47 or 50 mm membranes (not included) and has three ports for venting (with or without syringe filters) and aseptic addition of samples
- Ports can also be attached to a pressure source
- Upper chamber is supplied with two membrane support plates: a sterilization plate and an analytical plate

### Sterilization plate (one-piece, clear)

- Provides maximum flow rate and throughput
- Suitable for cold sterilization or clarification of culture media, reagents or solvents that are compatible with holder and membrane materials
- Nominal filter area, 13.3 cm<sup>2</sup>

### Analytical plate (two-piece, white)

- Provides optimal membrane support and keeps membrane flat to facilitate analytical procedures
- Suitable for analysis of particulates and biological contaminants, or any microbiological analyses using the membrane filter technique
- Nominal filter area, 11.3 cm<sup>2</sup>

**Includes:** Complete upper chamber, storage bottle, polypropylene cover and TPE port caps. (Membranes not included.)

### Nalgene Reusable Filter Holders with Storage Bottle

Cat. No.	Upper Chamber, mL	Storage Capacity, mL	Dia. x H, mm	No. per Pack	No. per Case
300-4000	250	250	83 x 180	1	4
300-4050	500	500	117 x 230	1	4
300-4100	500	1000	117 x 293	1	4



## ► Thermo Scientific Nalgene Reusable Filter Holder with Funnel



**Nalgene™ Polysulfone Filter Holder with Funnel** can be used with any filtering flask or manifold that accepts a suitable rubber stopper with hole.

These filter holders with funnel are made of washable, autoclavable polysulfone and provide an environmentally friendly alternative to disposable filters.

### details

- Reusable, autoclavable polysulfone lasts for years
- Graduated upper chamber for easy sample measurement
- Includes analytical and sterilization support plates
- Use with filtering flasks or manifolds; includes no-twist vacuum gasket that replaces #7 or #8 stopper with hole

**Includes:** Rugged polysulfone funnel; polypropylene copolymer cover with three ports, three friction-fit TPE caps; support plate for 47 mm membrane; no-twist vacuum silicone gasket which can replace a No. 7 or 8 rubber stopper with 9/16 in. (15 mm) hole.

### Nalgene Filter Holder with Funnel

Cat. No.	Autoclavable	Capacity, mL	Dia. x H, mm	No. per Case
DS0310-4000	Yes	250	94 x 190	1
DS0310-4050	Yes	500	120 x 214	1

## ► Thermo Scientific Nalgene Reusable Filter Funnel with Clamp



**Nalgene™ Reusable Filter Funnels with Clamps** are ideal for labs doing high-throughput particle and microbiological QC testing.

The quick release clamp provides fast and easy retrieval of membranes for efficient processing of large numbers of samples. The durable, break-resistant polysulfone funnel is strong, non-toxic and can be repeatedly washed and autoclaved.

### details

- Tight fit prevents bypass even after autoclaving
- Reservoir graduated from 100 to 250 mL in 25 mL increments
- Aluminum clamp allows one-handed operation and easy membrane replacement
- Autoclavable

**Includes:** Rugged polysulfone funnel; polypropylene copolymer cover with three ports, three friction-fit TPE caps; support plate for 47 mm membrane; silicone gasket; No. 8 stopper (9/16 in. hole); aluminum clamp.

Manifold sold separately (Cat. No. DSO 345-0001)

### Nalgene Reusable Filter Funnel with Clamp

Cat. No.	Autoclavable	Capacity, mL	No. per Case
DS0315-0047	Yes	250	1



## ► Thermo Scientific Nalgene Reusable Bottle Top Filters



**Nalgene™ Polysulfone Reusable Bottle Top Filters screw securely onto glass media bottles with 33 or 45 mm neck thread sizes.**

The convenience of a bottle top filter with the savings of reusability.

### details

- Available in 250 and 500 mL sizes
- Polysulfone is strong, washable and autoclavable
- Non-cytotoxic
- Molded-in graduations make it easy to see sample volume
- Polypropylene tubing adapter can be stuffed with cotton for sterile venting during autoclaving
- Removable sterilization membrane support plate is designed to provide maximum flow rate and throughput
- Accepts 1/4 to 5/16 in. (6 to 8 mm) I.D. vacuum tubing

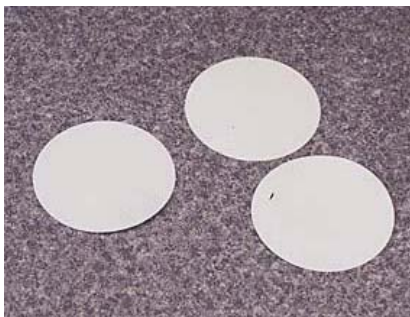
### Nalgene Reusable Bottle Top Filters

Cat. No.	Funnel, mL	Neck Thread Size, mm	No. per Case
DS0320-2545	250	45	1
DS0320-5033	500	33	1
DS0320-5045	500	45	1





## ► Thermo Scientific Nalgene Filter Membranes



**Nalgene™ Filter Membranes are ideal for use in particulate and microbial analysis.**

Select cellulose acetate (CA) for cold sterilization and nylon membrane (NYL) for solvent filtration.

### details

#### Cellulose Acetate (CA) Membrane

- Excellent chemical resistance to alcohol and oil
- Ideal for cold sterilization of proteinaceous solutions
- Able to be used in short-term contact with methyl ethyl ketone
- Suited for liquid scintillation studies
- Can be cleared for direct observation using paraffin or almond oil
- Non-sterile, autoclavable (membrane must be wet when autoclaved)

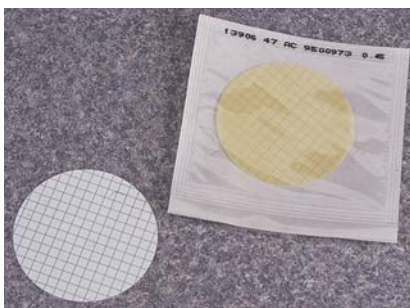
#### Nylon (NYL) Membrane

- Extremely low levels of extractables – no wetting agent
- Use for aqueous and organic solvent filtrations
- Use to sterilize buffers and culture media
- Use with HPLC solvents
- Non-sterile, autoclavable (membrane must be wet when autoclaved)

#### Nalgene Filter Membranes

Cat. No.	Membrane Dia., mm	Color	Pore Size, µm	No. per Case
<b>Cellulose Acetate</b>				
DS0210-4020	47	White	0.2	100
DS0210-4045	47	White	0.45	100
<b>Nylon</b>				
DS0215-4020	47	White	0.2	100
DS0215-4045	47	White	0.45	100

## ► Thermo Scientific Nalgene Water Quality Membranes



Nalgene™ Water Quality Membranes are certified to meet requirements of standard methods for water quality work and ISO 7704.

### details

- 0.45 micron Cellulose Nitrate (CN), white/black grid
- Contains no extractables that inhibit or stimulate growth of bacteria
- Has no effect on pH of the media
- Exhibits neither toxicity nor chemical or physical changes induced by the sterilization method
- Sterile, individually wrapped, autoclavable

#### Nalgene Filter Membranes

Cat. No.	Membrane Dia., mm	Membrane Color	Pore Size, µm	No. per Case
DS0205-4045	47	White/Black grid	0.45	100



## ► Thermo Scientific Nalgene Glass Prefilters



**Nalgene™ Glass Prefilters increase filtration speed and throughput of highly viscous or heavily particulated solutions when used in conjunction with any Nalgene Rapid-Flow filter units or bottle top filters.**

### details

- Glass fiber prefilter discs
- Use with Nalgene 50, 75 and 90 mm dia. reusable filtration products (Cat. Nos. 300, DS0310, DS0330, DS0315, DS0320) and all Nalgene Rapid-Flow filter units and bottle top filters

**Ordering Information:** The 75 mm size is included in cases of Nalgene 500 and 1000 mL Cellulose Nitrate (CN), nylon and surfactant-free cellulose acetate (SFCA) membrane filter units.

### Nalgene Glass Prefilters

Cat. No.	Membrane Material	O.D., mm	No. per Case
DS0281-5000	Glass-fiber	50	100
DS0281-7500	Glass-Fiber	75	100
DS0281-9000	Glass-fiber	90	100

## ► Syringe Filter Application Guide

	Cat. No.		Application	Volume, mL	Prefilter/membrane/housing
	171-0020	Non-sterile bulk-packed	Cleaning of micro/immunological reagents, enzymes, antibodies	0.5-1	CA membrane, PP housing
	171-0045	Non-sterile bulk-packed	Prefiltration of micro/immunological reagents	0.5-1	CA membrane, PP housing
	176-0020	Non-sterile bulk-packed	Cleaning of aqueous solutions, HPLC solvents, alcohols and DMSO	0.5-1	Nylon membrane, PP housing
	176-0045	Non-sterile bulk-packed	Prefiltration and clarification of aqueous solutions, HPLC solvents, alcohols and DMSO	0.5-1	Nylon membrane, PP housing
S	180-1320	Sterile, individually blister-packed	Sterilization of microbial media, proteinaceous solutions and tissue culture reagents	2-10	PES membrane, Modified acrylic housing
	187-1320	Non-sterile bulk-packed; autoclavable	Cleaning of organic solvents and alcohols; venting of air, gases	2-10	PTFE membrane, PP housing
	187-1345	Non-sterile bulk-packed; autoclavable	Prefiltration and clarification of organic solvents and alcohols; venting of air, gases	2-10	PTFE membrane, PP housing
	189-2000	Non-sterile bulk-packed	Prefiltration and clarification of highly viscous solutions, removal of large particulates from suspensions	N/A	Glass-Fiber prefilter, Modified acrylic housing
S	190-2520	Sterile, individually blister-packed	Sterilization of microbial media, proteinaceous solutions and tissue culture reagents	10-100	SFCA membrane, Modified acrylic housing
S	190-2545	Sterile, individually blister-packed	Prefiltration/clarification of aqueous solutions/alcohols, prefiltration of serum and other proteinaceous samples	10-100	SFCA membrane, Modified acrylic housing
S	190-2580	Sterile, individually blister-packed	Prefiltration, serial filtration and clarification of aqueous solutions, serum and alcohols; Removal of cell residues	10-100	CA membrane, Modified acrylic housing
	191-2020	Non-sterile bulk-packed	Cleaning of aqueous and proteinaceous solutions and alcohols	10-100	SFCA membrane, Modified acrylic housing
	191-2045	Non-sterile bulk-packed	Prefiltration/clarification of aqueous solutions/alcohols, prefiltration of serum and other proteinaceous samples	10-100	SFCA membrane, Modified acrylic housing
	191-2080	Non-sterile bulk-packed	Prefiltration, serial filtration and clarification of aqueous solutions, serum and alcohols; Removal of cell residues	10-50	CA membrane, Modified acrylic housing
S	192-2520	Sterile, individually blister-packed	Two-stage filtration (prefilter/membrane) for sterilization of highly viscous solutions and/or with high particle loads	10-200	Glass-fiber pre-filter, CA membrane, Modified acrylic housing
S	194-2520	Sterile, individually blister-packed	Sterilization of microbial media, proteinaceous solutions and tissue culture reagents	10-100	PES membrane, Modified acrylic housing
S	194-2545	Sterile, individually blister-packed	Sterilization of microbial media, proteinaceous solutions and tissue culture reagents	10-100	PES membrane, Modified acrylic housing
S	195-2520	Sterile, individually blister-packed	Sterilization of tissue culture media, cleaning of aqueous solutions, HPLC solvents, alcohols and DMSO	10-100	Nylon membrane, PP housing
S	195-2545	Sterile, individually blister-packed	Prefiltration and clarification of aqueous solutions, HPLC solvents, alcohols and DMSO	10-100	Nylon membrane, PP housing
	196-2020	Non-sterile bulk-packed; autoclavable	Cleaning of aqueous solutions, HPLC solvents, alcohols and DMSO	10-100	Nylon membrane, PP housing
	196-2045	Non-sterile bulk-packed; autoclavable	Prefiltration and clarification of aqueous solutions, HPLC solvents, alcohols and DMSO	10-50	Nylon membrane, PP housing
	199-2020	Non-sterile bulk-packed; autoclavable	Cleaning of organic solvents and alcohols, venting of air and other gases	10-100	Teflon® PTFE membrane, PP housing
	199-2045	Non-sterile bulk-packed; autoclavable	Prefiltration and clarification of organic solvents and alcohols, venting of air and gases	10-100	Teflon® PTFE membrane, PP housing
	DS0222-0020	Non-sterile bulk-packed; autoclavable	Cleaning of organic solvents and alcohols, venting of air and other gases	0.2-5 L	PTFE membrane, PP housing
	DS0222-0045	Non-sterile bulk-packed; autoclavable	Prefiltration and clarification of organic solvents and alcohols, venting of air and gases	0.2-5 L	PTFE membrane, PP housing

S Indicates sterile product † at 45 psig/3.1 bar with water †† at 15 psig/1.0 bar with methanol \* Isopropanol § Air at 1.4 psig/0.1 bar

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Syringe Filter Application Guide, continued

Cat. No.	Pore size, $\mu\text{m}$	Memb. dia., mm	Filter area	Housing burst pressure (psig/bar)	Bubble Point (psig/bar)	Hold Up Vol., after air purge	Nom. Flow Rate, water at 14.7/1 psig/bar ( mL/min.)
171-0020	0.2 $\mu\text{m}$	4	7 mm <sup>2</sup>	75/5.1	45/3.1	10 $\mu\text{L}$	3
171-0045	0.45 $\mu\text{m}$	4	7 mm <sup>2</sup>	75/5.1	28/1.9	10 $\mu\text{L}$	10
176-0020	0.2 $\mu\text{m}$	4	7 mm <sup>2</sup>	75/5.1	40/2.7	10 $\mu\text{L}$	1
176-0045	0.45 $\mu\text{m}$	4	7 mm <sup>2</sup>	75/5.1	29/1.9	10 $\mu\text{L}$	3
180-1320	0.2 $\mu\text{m}$	13	0.8 cm <sup>2</sup>	75/5.1	35/2.4	20 $\mu\text{L}$	22 <sup>†</sup>
187-1320	0.2 $\mu\text{m}$	13	0.8 cm <sup>2</sup>	100/7.1	13/0.9	30 $\mu\text{L}$	15 <sup>††</sup>
187-1345	0.45 $\mu\text{m}$	13	0.8 cm <sup>2</sup>	100/7.1	7/0.5	3 $\mu\text{L}$	28 <sup>††</sup>
189-2000	N/A	25	5.3 cm <sup>2</sup>	75/5.1	N/A	N/A	N/A
190-2520	0.2 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	45/3.1	0.25 mL	70
190-9920	0.45 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	28/1.9	0.25 mL	180
190-2545	0.45 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	28/1.9	0.25 mL	180
190-9945	0.45 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	28/1.9	0.25 mL	180
190-2580	0.8 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	7/0.5	0.25 mL	300
191-2020	0.2 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	45/3.1	0.25 mL	70
191-2045	0.45 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	28/1.9	0.25 mL	180
191-2080	0.8 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	7/0.5	0.25 mL	300
192-2520	0.2 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	45/3.1	0.2 mL	90
194-2520	0.2 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	42/2.8	0.15 mL	175 <sup>†</sup>
194-2545	0.45 $\mu\text{m}$	25	5.3 cm <sup>2</sup>	75/5.1	30/2.1	0.15 mL	300 <sup>†</sup>
195-2520	0.2 $\mu\text{m}$	25	2.8 cm <sup>2</sup>	90/6.2	42/2.8	0.15 mL	70
195-2545	0.45 $\mu\text{m}$	25	2.8 cm <sup>2</sup>	90/6.2	25/1.7	0.15 mL	95
196-2020	0.2 $\mu\text{m}$	25	2.8 cm <sup>2</sup>	90/6.2	42/2.8	0.15 mL	35
196-2045	0.45 $\mu\text{m}$	25	2.8 cm <sup>2</sup>	90/6.2	25/1.7	0.15 mL	95
199-2020	0.2 $\mu\text{m}$	25	2.8 cm <sup>2</sup>	90/6.2	15/1.0*	0.25 mL	45*
199-2045	0.45 $\mu\text{m}$	25	2.8 cm <sup>2</sup>	90/6.2	6/0.4*	0.25 mL	80*
DS0222-0020	0.2 $\mu\text{m}$	50	20 cm <sup>2</sup>	60/4.1	13/0.9*	1.0 mL	5000 <sup>§</sup>
DS0222-0045	0.45 $\mu\text{m}$	50	20 cm <sup>2</sup>	60/4.1	7/10.5*	1.0 mL	8500 <sup>§</sup>

S Indicates sterile product † at 45 psig/3.1 bar with water †† at 15 psig/1.0 bar with methanol \* Isopropanol § Air at 1.4 psig/0.1 bar

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## ► Thermo Scientific Nalgene Syringe Filters

### 4 mm Diameter



**Nalgene™ Syringe Filters (4 mm diameter) can accommodate sample volume sizes of 0.5 to 1.0 mL.**

Cellulose acetate (CA) membrane filters are excellent for EIA and ELISA assay sample prep. Nylon membrane filters are excellent for filtration of HPLC and CG solvents and clarification of DMSO.

Nontoxic Triton™-free membranes are sealed within housing to eliminate bypass and minimize fluid loss. Use with both slip-fit and locking-type Luer syringes.

#### details

- 0.5 to 1.0 mL sample size
- Inlet: Female Luer-Lok™
- Outlet: Male Luer slip
- Autoclavable

#### Cellulose Acetate (CA) Membrane

- Low protein binding
- Ideal for sterilization and clarification of biological/immunological samples, cell culture media components, biological fluids, most other aqueous solutions and reagents, including EIA and ELISA samples

#### Nylon (NYL) Membrane

- Naturally hydrophilic, low extractables
- Useful for sterilizing cryoprotectants such as DMSO and with aqueous/biological and nonaqueous/HPLC/GC solvent applications

#### Nalgene Syringe Filters

Cat. No.	Color Code	Membrane	Pore Size, µm	No. per Pack/Case
171-0020	Blue	CA	0.2	100/400
176-0020	Purple	Nylon	0.2	100/400
171-0045	Orange	CA	0.45	100/400
176-0045	Green	Nylon	0.45	100/400



## ► Thermo Scientific Nalgene Syringe Filters 13 mm Diameter



**Nalgene™ Syringe Filters (13 mm diameter) can accommodate sample volumes from 2 to 10 mL.**

For small volume filtration of aqueous solutions and media (PES membrane) or solvents (PTFE membrane).

Nontoxic Triton™-free membranes are integrally sealed within housing to eliminate bypass and minimize fluid loss. Membranes are supported on both sides, for vacuum or pressure filtration. Use with both slip-fit and locking-type Luer syringes.

### details

- 2 to 10 mL sample size
- Inlet: Female Luer-Lok™
- Outlet: Male Luer slip

#### PTFE Teflon® Membrane

- Naturally hydrophobic
- Ideal for sterile venting of air or other gases during filtration
- Membrane is in polypropylene housing that is resistant to corrosive acids, bases and organic solvents
- Excellent for HPLC/GC solvent filtration
- Non-sterile; autoclavable

#### Polyethersulfone (PES) Membrane

- Higher flowrates, lower protein binding and lower extractables than cellulosic membranes
- Ideal for sterile filtration and clarification of cell culture media, buffers and additives
- Naturally hydrophilic; contains no wetting agents
- Membrane is in modified acrylic housing
- Certified sterile, non-cytotoxic and non-pyrogenic
- Do not autoclave

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### Nalgene Syringe Filters

Cat. No.	Membrane	Pore Size, µm	Sterile	No. per Case
<b>Acrylic housing</b>				
180-1320	PES	0.2	Yes	50
<b>Polypropylene housing</b>				
187-1320	PTFE	0.2	No	100
187-1345	PTFE	0.45	No	100



## ► Thermo Scientific Nalgene Syringe Prefilter



**Nalgene™ Syringe Prefilter can clarify small volumes of highly viscous solutions and remove large particulates from suspensions.**

Use with standard and Luer-Lok™ syringes; also accepts hypodermic needles. For serial filtration, Luer-Lok outlet provides positive-locking connection to downstream syringe filter.

### details

- Disposable 25 mm prefilter
- Prevents clogging of final filter
- Increases sample recovery
- One-piece modified acrylic housing provides leak-resistant seal, eliminating bypass and minimizing fluid loss
- Glass fiber medium
- Contains no adhesives that can affect results

### Nalgene Syringe Prefilter

Cat. No.	Description	Sterile	Dia., mm	No. per Case
189-2000	Syringe Prefilter	No	25	50

## ► Thermo Scientific Nalgene Syringe Prefilter Plus



**Nalgene™ Syringe Prefilter Plus provides two-stage filtration for sterilization of highly viscous solutions or solutions with high particulate loads. The filter and prefilter membranes are combined in one disposable unit.**

Prefilter increases sample yield by preventing larger particles from clogging the downstream membrane.

### details

- Filter and prefilter in one disposable unit
- 25 mm filter with cellulose acetate membrane and integral glass fiber prefilter
- CA pore size: 0.2 µm
- Certified non-cytotoxic and non-pyrogenic

### Nalgene Syringe Prefilter Plus

Cat. No.	Membrane	Material or Housing	Sterile	Dia., mm
192-2520	Glass-Fiber and 0.2 µm Cellulose Acetate Membrane	Modified Acrylic	Yes	25

## ► Thermo Scientific Nalgene Syringe Filters

25 mm Diameter



**Nalgene™ Syringe Filters (25 mm diameter) are ideal for sample volumes of 10 to 50 mL.**

Use for culture media and additives (PES, SFCA), buffers (CA), alcohol or DMSO (Nylon), and HPLC/GC solvents (PTFE).

Membranes are sealed within the housing to eliminate bypass and minimize fluid loss. Membranes are supported on both sides, for vacuum or pressure filtration. Sterile versions are certified sterile, non-cytotoxic and non-pyrogenic.

Use with both slip-fit and locking-type Luer syringes; accepts standard hypodermic needles.

### details

- 10 to 50 mL sample size
- Inlet: Female Luer-Lok™; Outlet: Male Luer slip
- Pore size and membrane type printed on unit

#### Surfactant-free Cellulose Acetate (SFCA) Membrane

- Ideal for sterilization and clarification of: biological/immunological samples, cell culture media and additives, and biological fluids
- Low protein binding
- No wetting agents
- Modified acrylic housings

#### Cellulose Acetate (CA) Membrane

- Ideal for sterile filtration buffers, aqueous solutions and reagents
- Low protein binding
- Modified acrylic housings

#### Polyether Sulfone (PES) Membrane

- Best choice for cell culture media
- Lowest protein binding
- Lowest extractables
- Modified acrylic housings

#### Nylon Membrane

- Useful for sterilizing cryoprotectants such as DMSO, and for filtration of aqueous/biological and nonaqueous/HPLC/GC solvents
- Low extractables
- Polypropylene housings

#### PTFE Teflon® Membrane

- Solvent resistant
- Use for prefiltration and clarification of organic solvents and alcohols
- Also good for venting of air or other gases
- Polypropylene housings

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## ► Thermo Scientific Nalgene Syringe Filters

25 mm diameter, continued

### Nalgene Syringe Filters

Cat. No.	Membrane	Pore Size, $\mu\text{m}$	Sterile	No. per Case
<b>Acrylic housing</b>				
190-2520	SFCA	0.2	Yes	50
190-9920	SFCA	0.2	Yes	125
190-2545	SFCA	0.45	Yes	50
190-9945	SFCA	0.45	Yes	125
190-2580	CA	0.8	Yes	50
191-2020	SFCA	0.2	No	300
191-2045	SFCA	0.45	No	300
191-2080	CA	0.8	No	300
194-2520	PES	0.2	Yes	50
194-2545	PES	0.45	Yes	50
<b>Polypropylene housing</b>				
195-2520	Nylon	0.2	Yes	50
195-2545	Nylon	0.45	Yes	50
196-2020	Nylon	0.2	No	300
196-2045	Nylon	0.45	No	300
199-2020	PTFE	0.2	No	300
199-2045	PTFE	0.45	No	300

## ► Thermo Scientific Nalgene 50 mm Inline Syringe Filter PTFE Membrane



**Nalgene™ 50 mm Inline Syringe Filter with PTFE Teflon® membrane is used for filtration of aggressive chemicals, including acids and non-aqueous solvents, such as those used in GC and HPLC.**

Also for sterile filtration of air and gases.

Useful for benchtop fermenters, in-line gas filtration for sterile air or CO<sub>2</sub> and to protect vacuum pumps from damage by aqueous solutions. Also designed for filtration of aggressive chemicals and solvents such as those used in GC and HPLC.

### details

- Sample volume size: 0.2 to 5.0 L
- Inlet/Outlet: Stepped hose barb accepts 1/4 to 3/8 in. (6 to 9 mm) I.D. tubing
- 0.2 and 0.45 µm pore sizes
- Autoclavable
- Polypropylene housing

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corp.

### Nalgene 50 mm Inline Syringe Filter PTFE Membrane

Cat. No.	O.D., mm	Pore Size, µm	No. per Case
DS0222-0020	50	0.2	10
DS0222-0045	50	0.45	10

## ► Thermo Scientific Nalgene Carboy Vent Filter



**Nalgene™ Carboy Vent Filter is used for venting and solvent filtration applications.**

PTFE Teflon® filter membrane is ideal for maintaining purified water stored in carboys or for sterile venting during carboy autoclaving. Permits sterile venting on a slow exhaust/liquid autoclave cycle of Nalgene PP and PC carboys up to 50 liters.

### details

- PTFE membrane, polypropylene housing
- Hydrophobic 0.2 µm membrane
- Disposable
- Can be used up to five times in venting applications
- Non-sterile

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### Nalgene Carboy Vent Filter

Cat. No.	Description	Pore Size, µm	No. per Case
223-0030	Carboy Vent Filter	0.2	3



## ► Thermo Scientific Nalgene Vacuum Manifold



**Nalgene™ Vacuum Manifold features widely spaced outlets that permit easy funnel manipulation.**

This stable benchtop unit is made of high-quality stainless steel and has three vacuum outlets, each with leakproof<sup>†</sup>, two-way valve and vent port.

### details

- Outlets are spaced for easy manipulation of individual filter funnels
- Teflon® stopcock on each valve shuts off flow when fewer than three outlets are used
- Ideal for use with Nalgene reusable filter funnel with clamp (Cat. No. DS0315-0047)
- Use with Nalgene analytical filter funnels or test filter funnels (Cat. Nos. 140-4045, 147-0045, 145-0020/-0045/-2020/-2045)

**Includes:** Three vacuum outlets, each with two-way valve and vent port; hose barb vacuum connector for 0.38 in. (9.5 mm) I.D. tubing.

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### Nalgene Vacuum Manifold

Cat. No.	Description	No. per Case
DS0345-0001	Vacuum Filter Funnel Manifold	1
DS0396-0080	Filter Stopper	





## ► Thermo Scientific Nalgene Vacuum Gasket for Filter Funnel



**Nalgene™ Vacuum Gasket is the bulk-packed version of the vacuum gasket included with each Nalgene filter holder with funnel (4000/-4050).**

Use our Nalgene Vacuum Gasket with any manifold or filtering flask in place of a #7 or #8 stopper; permits the filter funnel to slide quickly and easily in and out of the gasket without jamming.

### details

- Thermoplastic elastomer forms reliable seal
- For use with any filtering flask that requires a #7 or #8 stopper

**Ordering Information:** One vacuum gasket is packed with each Nalgene filter holder with funnel (Cat. No. DS0310-4000/-5050) and with each package of analytical filter funnels (Cat. No. 140-4045).

#### Nalgene Vacuum Gasket for Filter Funnels

Cat. No.	Description	No. per Case
DS0395-0708	Vacuum Gasket	6

## ► Thermo Scientific Nalgene Filter Funnel Adapter



**The Nalgene™ Filter Funnel Adapter is the bulk-packed version of funnel adapters included with 145- and 147-series analytical test filter funnels.**

Useful for high-throughput QC testing laboratories.

### details

- Polypropylene
- Non-sterile

#### Nalgene Filter Funnel Adapter

Cat. No.	Description	No. per Case
DS0397-0010	Filter Funnel Adapter	25



## ► Thermo Scientific Nalgene Stainless Steel Forceps



**Nalgene™ Stainless Steel Forceps are available in bent or straight-tip styles.**

Bent-tip style is designed for easy removal and manipulation of filter membranes.

### details

- Stainless steel
- Self-closing (bent tip)
- Serrated gripping area
- Autoclavable

#### Nalgene Stainless Steel Forceps

Cat. No.	Tip Style	No. per Case
DS0399-0001	Bent tip	1
DS0399-0002	Straight tip	1

## ► Thermo Scientific Nalgene Polycarbonate Filling Bell



**Nalgene™ Polycarbonate Filling Bell is used to transfer sterile media aseptically from large containers to media bottles or culture vessels.**

The bell is ideal for aseptic media transfer to small vessels or bottles.

Transparent and autoclavable, this filling bell fits most common media bottles.

### details

- Nontoxic polycarbonate will not shatter
- Beaded bell lip for added strength
- Equipped with autoclavable polypropylene tubing adapter that accepts 1/4, 3/8 and 1/2 in. I.D. (6, 9, and 13 mm) tubing
- Bell I.D., 2-7/8 in. (70 mm)
- Dripless inner fill tube has length of 2-1/2 in. (63 mm); O.D., 3/8 in. (9 mm); I.D., 1/4 in. (6 mm)

**Ordering Information:** Overall height with tubing adapter, 4-1/2 in. (114 mm).

#### Nalgene Polycarbonate Filling Bell

Cat. No.	Description	H x I.D., mm	Inside Dia., mm	No. per Case
DS0390-0070	Filling Bell	114 x 70	70	1

## ► Thermo Scientific Nalgene Bubble Point Test Apparatus



**The Nalgene™ Bubble Point Test Apparatus tests filter unit membranes without removing the membrane from the filter unit.**

An efficient method to test any Nalgene Rapid-Flow™ Filter Unit or Bottle Top™ Filter, which helps insure product integrity.

### details

- Cast aluminum
- Tests the bubble point of 50, 75 and 90 mm diameter Nalgene filtration products
- Calibrated gauge and pressure source not included
- Accepts 1/4 in. (6 mm) I.D. tubing

**Includes:** Adapters and o-rings

#### Nalgene Bubble Point Test Apparatus

Cat. No.	Description	No. per Case
DS0405-0050	Bubble Point Test Apparatus	1



## general labware | 194-407

### Not all labware is created equal.

Thermo Scientific Nalgene bottles, carboys and labware set the standard for quality and superior performance, protecting your valuable research. So exceptional, our bottle closure system comes with a leakproof guarantee. So trusted, millions of our products are used in laboratories around the world. Nalgene™ products are available in a wide range of high-quality materials, sizes and configurations to meet your demanding applications.

Nalgene containers and plastic labware are less likely to break or shatter than glass, making your lab a safer place while protecting your valuable work. They are reusable and extremely durable, reducing the waste of disposable containers and preventing the accidental release of hazardous materials. Our lightweight labware is easy to handle and will last for years without chipping, cracking or breaking, so replacing expensive glassware with plastic just makes sense.

► For additional information about Thermo Scientific Nalgene Containers and Labware, please visit:  
[www.thermoscientific.com/labware](http://www.thermoscientific.com/labware)



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# superior performance



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## Closure system

Designed and offered as a system, Nalgene bottles and closures are guaranteed leakproof\* and offer superior resealability. Most Nalgene closures have no liner\*\* that can wear, crease, cause contamination or separate.

Nalgene closures are made specifically for Nalgene bottles. Use of Nalgene bottles or closures with non-Nalgene components voids the leakproof guarantee. All bottles in this catalog have Nalgene closures available.

\* *Leakproof* defined in the product sections.

\*\* Closures with gaskets or liners are noted in the product descriptions.



## ► Thermo Scientific Nalgene Sample Bags low-density polyethylene



**Nalgene™ Sample Bags are ideal for small lab items, botanical samples and other specimens.**

These heavy-duty, double-track zipper bags lock securely, so dry samples stay dry and moist samples stay moist.

### details

- Low-density polyethylene is clear for easy identification of contents
- 4-mil thick walls are strong and waterproof, to protect your samples
- Bags are waterproof to keep contents dry
- Transparent

*Notes: Not recommended for storing liquids*

### Nalgene Sample Bags

Cat. No.	W x L, cm (in.)	No. per Pack	No. per Case
6255-0406	10.2 x 15.2 (4 x 6)	50	500
6255-0508	12.7 x 20.3 (5 x 8)	50	500
6255-0613	15.2 x 33.0 (6 x 13)	50	250
6255-0913	22.9 x 33.0 (9 x 13)	50	250
6255-0918	22.9 x 45.7 (9 x 18)	50	250



**seal ring** A seal ring molded inside the closure fits tightly against the beveled inner edge (chamfer) of the bottle neck forming a leakproof valve seal as the closure is tightened. Most bottles and closures are molded of different materials to enhance their sealing capability.

**neck ring** Most Nalgene bottles have a neck ring for use with tamper-evident shrink bands.

**threads** Nalgene containers have continuous straight-shouldered, semi-buttress threads. They are deeper than you'll find on typical plastic or glass bottles. It's virtually impossible to jump or strip the threads by over-torque. They're another mark of good bottle design.

**heavy-duty, uniform walls** You can feel and see the difference. Advanced molding technology provides walls with a degree of uniform thickness and quality you will not find in other bottles. The durable walls of Nalgene bottles are unusually resistant to splitting or puncturing.

**bottom** Look at the bottom of a Nalgene bottle. The base is flatter than most for greater stability – especially important when bottles are used on filling lines. Resin identification letters are molded into the bottom, along with the capacity. SPI recycling codes are molded into Lab Quality Bottles 500 mL and larger.

## ► Thermo Scientific Nalgene Griffin Low-Form Beakers polypropylene copolymer



**Nalgene™ Griffin Low-Form Beakers provide excellent chemical resistance and convenient stacking capabilities.**

All sizes have easy-to-read silk-screened graduations.

### details

- No drip, single-spout design provides precision pouring control
- With ribs for easy stacking
- Silk screened with graduations, size code, resin code, catalog number, max. temperature and "No Flame" symbol for easy identification and safe use
- Autoclavable/Graduated

**Compliance:** Meets ISO/DIN 7056 International Standards for Laboratory Plasticware Beakers.

*Notes: Not for use on hotplates.*

### Nalgene Griffin Low-Form Beakers

Cat. No.	Capacity, mL	No. per Pack	No. per Case
1201-0030	30	12	48
1201-0050	50	12	48
1201-0100	100	12	48
1201-0150	150	12	48
1201-0250	250	6	36
1201-0400	400	6	36
1201-0600	600	4	24
1201-1000	1000	3	12
1201-2000	2000	1	6
1201-4000	4000	1	4



## ► Thermo Scientific Nalgene Griffin Low-Form Beakers polymethylpentene



**Nalgene™ Griffin Low-Form Beakers are suitable for continuous use at 150°C with intermittent service to 175°C.**

Beakers have the transparency of glass, excellent chemical resistance and heat tolerance. All size beakers have easy to read silk-screened graduations.

### details

- Transparent PMP material allows a clear view of beaker contents
- No-drip, single-spout design provides precision pouring control
- With ribs for easy stacking
- Silk-screened with graduations, size code, resin code, catalog number, max. temperature and “No Flame” symbol for easy identification and safe use
- Autoclavable/Graduated/Transparent

**Compliance:** Meets ISO/DIN 7056 International Standards for Laboratory Plasticware Beakers.

*Notes: Not for use on hotplates.*

### Nalgene Griffin Low-Form Beakers

Cat. No.	Capacity, mL	No. per Pack	No. per Case
1203-0030	30	12	36
1203-0050	50	12	36
1203-0100	100	12	36
1203-0150	150	12	36
1203-0250	250	6	24
1203-0400	400	6	24
1203-0600	600	4	12
1203-1000	1000	3	12
1203-2000	2000	1	4
1203-4000	4000	1	4





## ► Thermo Scientific Nalgene Griffin Low-Form Beakers

Teflon® PFA (perfluoroalkoxy)



**Nalgene™ Low-Form Beakers are molded from chemically-resistant perfluoroalkoxy resin.**

Heavy-wall design makes these beakers sturdy and tough for continual lab usage. Tolerates a wide temperature range: -270°C to +250°C.

### details

- No-drip single-spout design provides precision pouring control
- Highly resistant to most chemicals, including the strongest sulfuric, nitric, chromic and phosphoric acids – will not contaminate contents with leachables
- Withstands extreme temperatures from -270°C to +250°C for versatility in your lab
- Autoclavable/PFA

*Notes: Not for use on hotplates.*

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### Nalgene Griffin Low-Form Beakers

Cat. No.	Capacity, mL	No. per Pack	No. per Case
1510-0050	50	1	6
1510-0100	100	1	6
1510-0250	250	1	6
1510-0600	600	1	4
1510-1000	1000	1	4







## ► Thermo Scientific Nalgene Graduated Beakers with Handles

high-density polyethylene



**Nalgene™ HDPE Beakers with handles feature an extra-heavy wall for safe handling of acids, alkalis and hot solutions.**

Sturdy rectangular handle is easy on the hands, and provides reliable support and dispensing control.

### details

- Molded-in graduations in both oz. and mL won't wear off with continuous use or washings
- Molded-in rectangular handle provides easy, safe handling and pouring
- Excellent chemical resistance makes these usable for a wide range of solutions
- Graduated

*Notes: Not for use on hotplates.*

#### Nalgene Graduated Beakers with Handles

Cat. No.	Capacity, mL	No. per Pack	No. per Case
1220-1250	1000	1	6
1220-2500	3000	1	6

## ► Thermo Scientific Nalgene Graduated Beakers with Handles

polymethylpentene



**Nalgene™ PMP Beakers resist acids, bases, aliphatic alcohols, aldehydes and esters.**

Beakers have rectangular handle for easy carrying and pouring and withstand continuous use at high temperatures.

### details

- Withstands continuous exposure to temperatures as high as 150°C and intermittent temperatures to 175°C
- Transparent to microwaves
- Transparent PMP material allows a clear view of beaker contents
- Molded-in graduation in both oz. and mL won't wear off with continuous use or washings
- Excellent chemical resistance to acids, bases and aliphatic alcohols make these beakers useful for a broad range of solutions
- Sturdy, molded-in rectangular handle provides easy, safe handling and pouring
- Autoclavable/Transparent/Graduated

*Notes: Not for use on hotplates.*

#### Nalgene Graduated Beakers with Handles

Cat. No.	Capacity, mL	No. per Pack	No. per Case
1223-1000	1000	1	6
1223-3000	3000	1	6



## ► Thermo Scientific Nalgene Graduated Beakers with Handles

Teflon® PFA (perfluoroalkoxy)



**Nalgene™ Beakers with Handles feature extraordinary chemical resistance and can be used repeatedly for high-purity applications.**

Can be used (and re-used) with strong oxidizing agents, acids, hydrocarbons and ketones. Widest temperature range: -270°C to +250°C. Not for use on hot plates. Teflon® PFA is “non-stick” making the beaker easy to clean and resistant to contamination.

### details

- Withstands exposure to extreme temperatures from -270°C to 250°C
- Rigid and translucent, enabling easy and consistent viewing of liquid levels
- Molded-in graduation in both oz. and mL won't wear off with continuous use or washings
- Excellent chemical resistance to strong oxidizing agents, acids, hydrocarbons and ketones make these beakers useful for a broad range of high-purity applications
- Molded-in rectangular handle provides easy, safe handling and pouring
- Autoclavable

*Notes: Not for use on hotplates.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Graduated Beakers with Handles

Cat. No.	Capacity, mL	No. per Case
DS1511-1000	1000	1
DS1511-3000	3000	1



The Thermo Scientific Nalgene Labware Value Pack offers a convenient assortment of beakers and other popular labware items.

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## ► Thermo Scientific Nalgene Clean Sheets Bench/Drawer Liner polyethylene



**Nalgene™ polyethylene bench/drawer liners are ideal as a sink liner or titration background.**

Can be cut to any size and stapled, tacked or taped. Provides cushioning and liquid barrier protection.

### details

- Made of 1/8 in. (3.2 mm) thick closed-cell polyethylene foam to cushion benchtop items
- Smooth and resilient, this nonabsorbent pad is versatile in your lab – use for a multitude of purposes
- Excellent chemical resistance provides protection wherever placed against spills
- Can be cut to any size to fit benches, shelves, drawers – anywhere protection is needed against spills, vibration, heat, dirt or breakage
- Non-absorbant

### Nalgene Clean Sheets™ Bench/Drawer Liner

Cat. No.	W x L	No. per Pack	No. per Case
6283-1250	305 mm x 15.2 m (12 in x 50 ft.)	1	2
6283-1850	457 mm x 15.2 m (18 in x 50 ft.)	1	2



## ► Thermo Scientific Nalgene Versi-Dry Surface Protectors

absorbent fiber with polyethylene backing



**Nalgene™ Versi-Dry™ Surface Protectors have thousands of Thirsty Cells to quickly absorb spills and cushion breakable labware.**

The polyethylene backing protects your benchtop from the harshest of chemicals. Can be used as a bench protector, shelf liner, cabinet liner or for wiping up isolated spills.

### details

- Cushioned surface minimizes breakage of glass labware when dropped or tipped over
- Skid resistant polyethylene backing resists harsh chemicals and protects your benchtop from spills and corrosion
- Low-pile flat surface provides stability for glassware that is likely to tip
- Versi-Dry quickly absorbs up to 750 mL/m<sup>2</sup> spills with its thousands of Thirsty Cells

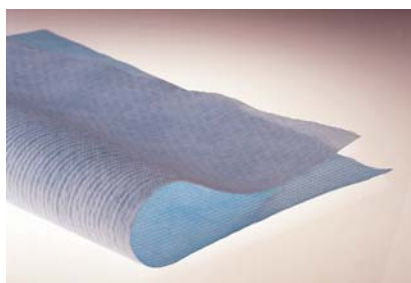
### Nalgene Versi-Dry Surface Protectors

Cat. No.	L x W	No. per Case
<b>Mat</b>		
62080-00	46 cm x 51 cm (18 x 20 in.)	350
<b>Dispenser Roll</b>		
62050-00	51 cm x 91 m (20 in x 300 ft)	1
62070-00	51 cm x 30 m (20 in x 100 ft)	4
<b>Rolls</b>		
62060-00	51 cm x 91 m (20 in x 300 ft)	2
62065-00	51 cm x 46 m (20 in x 150 ft)	2



## ► Thermo Scientific Nalgene Super Versi-Dry Surface Protectors

absorbent fiber with polyethylene backers



**Nalgene™ Super Versi-Dry™ Surface Protectors are long-lasting, waterproof, skid-resistant and chemical resistant.**

Cloth-like top layer will not fall apart even when wet. Absorbs spills and cushions breakable items.

### details

- Cushioned surface minimizes breakage of glass labware when dropped or tipped over
- Sheets lie flat and are skid resistant – use as a bench protector, tray liner, floor mat, cage liner or surgical mat
- Low-pile flat surface provides stability for glassware that is likely to tip and is an ideal replacement for the “blue diaper”
- Polyethylene backing resists harsh chemicals and protects your benchtop from spills and corrosion
- Super Versi-Dry quickly absorbs up to 1050 mL/m<sup>2</sup> to quickly absorb spills with its thousands of Thirsty Cells

### Nalgene Super Versi-Dry Surface Protectors

Cat. No.	Description	L x W	No. per Case
<b>Mats</b>			
74018-00		46 x 51 cm (18 x 20 in.)	350
74040-00		46 x 102 cm (18 x 40 in.)	175
74043-00	Table Mat	51 x 110 cm (20 x 43 in.)	150
74200-00	Floor Mat	102 x 508 cm (40 x 200 in.)	1
74218-00	Fume Hood Mat	46 x 51 cm (18 x 20 in.)	100
74240-00	Floor Mat	46 x 102 cm (18 x 40 in.)	50
<b>Rolls</b>			
74000-00		51 x 76m (20 in. x 250 ft.)	1
74050-00		30m x 51 cm (20 in. x 100 ft.)	4



## ► Thermo Scientific Nalgene Lab Quality Wide-Mouth Bottles

high-density polyethylene



**Nalgene™ Lab Quality Wide-Mouth Bottles are general purpose bottles with countless applications in the lab or field.**

Wide mouth makes these bottles easy to fill. They exhibit excellent chemical resistance to most acids, bases and alcohols and suitable for freezer use to -100°C or for shipping liquids. Leakproof† performance guaranteed.

### details

- Wide mouth makes these bottles easy to fill with solids or liquids
- Excellent chemical resistance to most corrosives make these bottles versatile and indispensable in your lab
- Ideal for storing, shipping and packaging liquids – uniform walls provide durability and resistance to splitting or punctures
- Can be used in a freezer down to -100°C (-148°F)
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Leakproof†

**Includes:** Polypropylene screw closures

† The term “leakproof” applies to Thermo Scientific Nalgene products that meet the following criteria: a) Bottle/flask/funnel closure systems with closures smaller than 100 mm, after they are filled with water, inverted, withstand air pressure of 2psig for 2 minutes, and no water escapes; b) Bottle/funnel/flask closure systems of larger than 100 mm after they are filled with water, inverted for 15 minutes, and no water escapes. Note: these tests, using other liquids, may not yield the same results. To ensure safe usage, customers are advised to test Thermo Scientific Nalgene bottles and closures under conditions of their planned applications. Thermo Scientific Nalgene products are leakproof at ambient temperature and pressure when used with their Nalgene closures.

### Nalgene Lab Quality Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2104-0001	30 (1)	28	21	34	63	12	72
2104-0002	60 (2)	28	21	39	86	12	72
2104-0004	125 (4)	38	28	50	99	12	72
2104-0008	250 (8)	43	33	61	131	12	72
2104-0016	500 (16)	53	44	73	168	12	48
2104-0032	1000 (32)	63	53	91	199	6	24
2104-0048	1500 (48)	63	52	91	284	6	24



## ► Thermo Scientific Nalgene Wide-Mouth Economy Bottles

natural high-density polyethylene, natural polypropylene screw closure



**Nalgene™ Wide-Mouth Economy Bottles** are lightweight versions of the original Nalgene Lab Quality Bottles, and are suitable for general purpose laboratory applications.

A leakproof<sup>†</sup>, lighter-weight, more flexible version of Nalgene Lab Quality Bottles for less rigorous lab use where a heavier bottle is not required. Wide mouth is easy to fill.

### details

- Economical and recyclable
- Wide mouth makes these bottles easy to fill with solids or liquids
- Linerless caps ensure leakproof performance without a liner that can wrinkle, cause leaks and contaminate your solutions
- Leakproof<sup>†</sup>

**Includes:** Polypropylene screw closures

### Nalgene Translucent Wide-Mouth Economy Bottles

Cat. No.	Capacity, mL (oz)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Case
2189-0001	30 (1)	28	21	34	63	72
2189-0002	60 (2)	28	21	39	86	72
2189-0004	125 (4)	38	28	50	99	72
2189-0008	250 (8)	43	33	61	131	72
2189-0016	500 (16)	53	44	73	168	48
2189-0032	1000 (32)	63	53	91	199	24





## ► Thermo Scientific Nalgene Wide-Mouth Economy Bottle Bulk Pack

high-density polyethylene, polypropylene screw closure



**Nalgene™ Wide-Mouth Economy Bottle is a lightweight version of the original Nalgene bottle bulk packed for ultimate economy.**

Suitable for short-term general purpose laboratory and field applications such as collecting samples and containing working solutions like buffers, bench reagents and chemical aliquots. Thinner-walled and more flexible than the Nalgene Lab Quality Bottle, but still guaranteed leakproof†. Wide mouth is easy to fill with dry materials or liquids.

Lightweight versions of the original Nalgene Lab Quality bottle, suitable for light-duty, general purpose applications where a heavier bottle is not required

### details

- Excellent chemical resistance to most acids, bases and alcohols
- Bulk packed for the ultimate in economical liquid containment
- Wide mouth makes these bottles easy to fill with solids or liquids
- Linerless caps ensure leakproof† performance without a liner that can wrinkle, cause leaks and contaminate your solutions
- Leakproof†

**Ordering Information:** Packaged in bulk quantities.

**Includes:** Polypropylene screw closures.

*Notes: Direct UV exposure should be avoided. The Nalgene Lab Quality Bottle (Cat. No. 2104) is recommended for hazardous and critical material containment.*

### Nalgene Wide-Mouth Economy Bottle Bulk Pack

Cat. No.	Capacity, mL (oz)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Case
332189-0002	60 (2)	28	21	39	86	1000
332189-0004	125 (4)	38	28	50	99	500
332189-0008	250 (8)	43	33	61	131	250
332189-0016	500 (16)	53	44	73	168	125
332189-0032	1000 (32)	63	53	91	199	50



## ► Thermo Scientific Nalgene Large Wide-Mouth Bottles

high-density polyethylene, white polypropylene screw closure



**Nalgene™ Large Wide-Mouth Bottles** are great for a wide range of lab and field uses – particularly recommended for storage of dry chemicals or water sampling.

Good for use in the freezer to -100°C (-148°F). Chemical resistant HDPE is compatible with a wide variety of lab reagents.

### details

- Excellent chemical resistance to most acids, bases and alcohols make this a versatile bottle
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Linerless cap closes the bottle without a liner that can wrinkle, cause leaks and contaminate your solutions
- This bottle is not liquid leakproof

**Includes:** 100 mm polypropylene screw closures.

### Nalgene Large Wide-Mouth Bottles

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2120-0005	2 (1/2)	100	89	119	244	1	6
2120-0010	4 (1)	100	89	153	288	1	6

## ► Thermo Scientific Nalgene Wide-Mouth Bottles

low-density polyethylene, polypropylene screw closures



**Nalgene™ Wide-Mouth Bottles are translucent and offer flexibility and impact resistance.**

Ideal for storing chemicals and standards, collecting and storing distilled water. Extremely low trace metal content in LDPE makes it ideal for trace metal analysis. Excellent chemical resistance to most acids, bases and alcohols.

### details

- Extremely low trace metal content in LDPE makes it ideal for trace metal analysis
- Excellent chemical resistance to most acids, bases and alcohols make this a versatile bottle; suitable for shipping liquids
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Wide mouth is easy to fill
- Translucence allows easy viewing of liquid levels
- Linerless caps ensure leakproof performance without a liner that can wrinkle, cause leaks and contaminate solutions
- Leakproof†

**Includes:** Polypropylene screw closures.

### Nalgene Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2103-0001	30 (1)	28	21	34	63	12	72
2103-0002	60 (2)	28	21	39	86	12	72
2103-0004	125 (4)	38	28	50	99	12	72
2103-0008	250 (8)	43	33	61	131	12	72
2103-0016	500 (16)	53	44	73	168	12	48
2103-0032	1000 (32)	63	53	91	199	6	24





## ► Thermo Scientific Nalgene Lab Quality Wide-Mouth Bottles

polypropylene copolymer, polypropylene screw closure



**Nalgene™ Lab Quality Wide-Mouth Bottles are ideal for storing specimens and where autoclaving is required.**

Wide mouth makes it easy to fill. Exhibits excellent chemical resistance to most acids, bases and alcohols.

### details

- General purpose bottle exhibits excellent chemical resistance for a variety of uses in the lab
- Translucence allows easy viewing of liquid levels
- Linerless caps ensure leakproof performance without a liner that can wrinkle, cause leaks and contaminate your solutions
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Lab Quality Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2105-0001	30 (1)	28	21	34	63	12	72
2105-0002	60 (2)	28	21	39	86	12	72
2105-0004	125 (4)	38	28	50	99	12	72
2105-0008	250 (8)	43	33	61	131	12	72
2105-0016	500 (16)	53	44	73	168	12	48
2105-0032	1000 (32)	63	53	91	199	6	24



## ► Thermo Scientific Nalgene Wide-Mouth Economy Bottles

polypropylene copolymer, polypropylene screw closure



**Nalgene™ Wide-Mouth Economy Bottles** are lightweight versions of the original Nalgene Lab Quality bottle, suitable for light-duty, general purpose applications where a heavier bottle is not required.

### details

- Lightweight versions of the original Nalgene Lab Quality bottle, suitable for light-duty, general purpose applications where a heavier bottle is not required
- Economical and recyclable
- Translucence allows easy viewing of liquid levels
- Linerless caps ensure leakproof performance without a liner that can wrinkle, cause leaks and contaminate your solutions
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Wide-Mouth Economy Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Case
2187-0001	30 (1)	28	21	34	63	72
2187-0002	60 (2)	28	21	39	86	72
2187-0004	125 (4)	38	28	50	99	72
2187-0008	250 (8)	43	33	61	131	72
2187-0016	500 (16)	53	44	73	168	48
2187-0032	1000 (32)	63	53	91	199	24



## ► Thermo Scientific Nalgene Large Wide-Mouth Bottles

polypropylene copolymer, white polypropylene screw closure



**Nalgene™ Large Wide-Mouth Bottles** are specifically designed for applications where large volumes require autoclaving – large cap makes it easy to access contents.

### details

- Designed for applications where large volumes require autoclaving
- Large cap makes it easy to access contents
- Excellent chemical resistance makes this bottle suitable for a wide variety of uses in the lab or field
- Linerless cap closes the bottle without a liner that can wrinkle, cause leaks and contaminate your solutions
- Autoclavable

**Includes:** 100 mm polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving. This bottle is not liquid leakproof.*

### Nalgene Large Wide-Mouth Bottles

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2121-0005	2 (1/2)	100	89	120	244	1	6
2121-0010	4 (1)	100	89	153	288	1	6



## ► Thermo Scientific Nalgene Lab Quality Amber Wide-Mouth Bottles

amber high-density polyethylene, amber polypropylene screw closures



**Nalgene™ Amber Wide-Mouth Bottles reduce UV light transmissions to protect light-sensitive contents.**

Useful for storage, shipping and packaging. Excellent chemical resistance to most acids, bases and alcohols. Easy to fill wide mouth. Guaranteed Leakproof†.

### details

- Opaque amber reduces UV light transmissions to protect light-sensitive contents
- Excellent chemical resistance to most acids, bases and alcohols make this a versatile bottle where exposure to light needs to be restricted
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Wide mouth is easy to fill
- Linerless caps ensure leakproof performance without a liner that can wrinkle, cause leaks and contaminate solutions
- Leakproof†

**Includes:** Amber polypropylene screw closures.

**Compliance:** Product meets the requirements for light-resistant containers per USP latest edition.

**Nalgene Lab Quality Amber Wide-Mouth Bottles**

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2106-0001	30 (1)	28	21	34	63	12	72
2106-0002	60 (2)	28	21	39	86	12	72
2106-0004	125 (4)	38	28	50	99	12	72
2106-0008	250 (8)	43	33	61	131	12	72
2106-0016	500 (16)	53	44	73	168	12	48
2106-0032	1000 (32)	63	53	91	199	6	24



## ► Thermo Scientific Nalgene Amber Wide-Mouth Economy Bottles

amber high-density polyethylene, amber polypropylene screw closures



**Nalgene™ Amber Wide-Mouth Bottles** are lightweight versions of the original Nalgene Amber Lab Quality bottle, suitable for light-duty, general purpose applications where a heavier bottle is not required.

Opaque Amber HDPE bottles reduce UV light transmissions to protect light-sensitive liquids.

Excellent chemical resistance to most acids, bases and alcohols make this a versatile bottle where exposure to light needs to be restricted

### details

- Opaque amber reduces UV light transmissions to protect light-sensitive liquids
- Economical and recyclable; designed for single use
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Wide mouth for easy filling, sampling
- Linerless caps ensure leakproof performance without a liner that can wrinkle, cause leaks and contaminate your solutions
- Leakproof†

**Includes:** Polypropylene screw closures.

**Compliance:** Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Amber Wide-Mouth Economy Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Case
DS2185-0001	30 (1)	28	21	34	63	72
DS2185-0002	60 (2)	28	21	39	86	72
DS2185-0004	125 (4)	38	28	50	99	72
DS2185-0008	250 (8)	43	33	61	131	72
DS2185-0016	500 (16)	53	44	73	168	48
DS2185-0032	1000 (32)	63	53	91	199	24





## ► Thermo Scientific Nalgene Wide-Mouth Bottles

polymethylpentene, polypropylene screw closure



**Nalgene™ Wide-Mouth PMP Bottles are designed to withstand temperatures from 20° to 175°C (68° to 347°F).**

Clear bottles offer better chemical resistance than transparent polycarbonate bottles. Withstands repeated autoclaving – even at 150°C (302°F). Guaranteed Leakproof†.

### details

- Designed to tolerate a wide range of temperatures for versatility in the lab
- Good chemical resistance to acids and bases make these bottles suitable for a wide range of solutions
- Better clarity than other bottles of similar chemical resistance
- Linerless caps ensure leakproof performance without a liner that can wrinkle, cause leaks and contaminate your solutions
- Autoclavable/Transparent/Leakproof†

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2107-0004	125 (4)	33	28	46	114	4	24
2107-0008	250 (8)	43	33	58	125	4	24
2107-0016	500 (16)	48	38	71	155	4	16
2107-0032	1000 (32)	53	43	89	203	4	16



## ► Thermo Scientific Nalgene Lab Quality Narrow-Mouth Bottles

high-density polyethylene, polypropylene screw closure



**Nalgene™ Lab Quality Bottles are specifically designed for demanding lab use.**

Nalgene Lab Quality Narrow-Mouth bottles are all-purpose Boston round bottles that are highly reliable and durable for long-term use. Ideal for storing, shipping and packaging liquids, these semi-rigid and translucent bottles offer excellent chemical resistance. Guaranteed leakproof†.

### details

- Excellent chemical resistance to most corrosives make these bottles versatile and indispensable in your lab
- Ideal for storing, shipping and packaging liquids – uniform walls provide durability and resistance to splitting or punctures
- Can be used in a freezer down to -100°C (-149°F)
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks or contaminate your reagents
- Leakproof†

**Includes:** Polypropylene screw closures.

### Nalgene Lab Quality Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2002-9125	4 (1/8)	13	8	16	41	12	72
2002-9025	8 (1/4)	20	14	25	45	12	72
2002-9050	15 (1/2)	20	14	25	58	12	72
2002-0001	30 (1)	20	14	34	61	12	72
2002-0002	60 (2)	20	14	37	85	12	72
2002-0004	125 (4)	24	18	50	101	12	72
2002-0006	175 (6)	24	18	54	125	12	72
2002-0008	250 (8)	24	18	61	133	12	72
2002-0016	500 (16)	28	21	73	170	12	48
2002-9016	500 (16)	38-430	27	73	170	12	48
2002-0032	1000 (32)	38-430	27	91	216	6	24

### ► Select the perfect container for your application.

Go to: [www.thermoscientific.com/nalgenecontainers](http://www.thermoscientific.com/nalgenecontainers)  
or download our free apps from iTunes or the Android market  
– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Narrow-Mouth Economy Bottles

natural high-density polyethylene



**Nalgene™ Narrow-Mouth Economy Bottles are lightweight versions of the original Nalgene Lab Quality Bottle, suitable for lighter-duty, general-purpose applications.**

Nalgene Economy Bottles are guaranteed leakproof, and are suitable for containing samples and daily working solutions like buffers and bench reagents. Guaranteed leakproof†.

### details

- Lightweight versions of the original Nalgene Lab Quality bottle, suitable for light-duty, general-purpose applications where a heavier bottle is not required
- Economical and reusable
- Translucence allows easy viewing of liquid levels
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks or contaminate your reagents
- Leakproof†

**Includes:** Polypropylene screw closures.

**Nalgene Narrow-Mouth Economy Bottles**

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Case
2089-0001	30 (1)	20	14	34	61	72
2089-0002	60 (2)	20	14	37	85	72
2089-0004	125 (4)	24	18	50	101	72
2089-0008	250 (8)	24	18	61	133	72
2089-0016	500 (16)	28	21	73	170	48
2089-0032	1000 (32)	38-430	27	91	216	24



## ► Thermo Scientific Nalgene Narrow-Mouth Economy Bottle Bulk Pack

high-density polyethylene, assembled



**Nalgene™ Narrow-Mouth Economy Bottle Bulk Packs are constructed of break-resistant translucent HDPE.**

These durable, break-resistant bottles are a lightweight version of the original Nalgene Lab Quality bottle, suitable for light-duty, general-purpose applications where a heavier bottle is not required. Guaranteed leakproof†.

### details

- Lightweight versions of the original Nalgene Lab Quality bottle suitable for light-duty, general-purpose applications where a heavier bottle is not required
- Economical and recyclable; designed for single use
- Translucence allows easy viewing of liquid levels
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks or contaminate your reagents
- Leakproof†

**Includes:** Polypropylene screw closures

**Ordering Information:** Conveniently packaged in bulk quantities

*Notes: Direct UV exposure should be avoided. The Nalgene Lab Quality Bottle (Cat. No. 2002-series) is recommended for hazardous or other critical material containment.*

### Nalgene Narrow-Mouth Economy Bottle Bulk Pack

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Case
332089-0004	125 (4)	24	18	50	101	500
332089-0008	250 (8)	24	18	61	133	250
332089-0016	500 (16)	28	21	73	170	125
332089-0032	1000 (32)	38-430	27	92	216	50



## ► Thermo Scientific Nalgene Narrow-Mouth Bottles

low-density polyethylene



**Nalgene™ LDPE Narrow-Mouth bottles are extremely low in trace metal content, making them an excellent choice for applications like trace metal analysis. Exhibits flexibility, impact resistance and excellent visibility of contents.**

Excellent chemical resistance to most acids, bases and alcohols. Guaranteed leakproof†.

### details

- Extremely low in trace metal content, making them an excellent choice for applications including trace metal analysis.
- Exhibits flexibility, impact resistance and excellent visibility of contents for a wide variety of uses in the lab
- Excellent chemical resistance to most acids, bases and alcohols make this a versatile bottle
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Translucence allows easy viewing of liquid levels
- Linerless caps provide the ultimate in leakproof protection without use of liner that can wrinkle, cause leaks or contaminate your reagents
- Leakproof†

**Includes:** Polypropylene screw closures.

*Notes: Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2003-9025	8 (1/4)	20	14	25	45	12	72
2003-9050	15 (1/2)	20	14	25	58	12	72
2003-0001	30 (1)	20	14	34	61	12	72
2003-0002	60 (2)	20	14	37	85	12	72
2003-0004	125 (4)	24	18	50	101	12	72
2003-0008	250 (8)	24	18	61	133	12	72
2003-0016	500 (16)	28	21	73	170	12	48
2003-9016	500 (16)	38-430	27	73	170	12	48
2003-0032	1000 (32)	38-430	27	91	216	6	24



## ► Thermo Scientific Nalgene Large Narrow-Mouth Bottles

low-density polyethylene



**Nalgene™ Large Narrow-Mouth Bottles are translucent and offer flexibility, impact resistance and excellent visibility of contents.**

Ideal for storing chemicals and standards, collecting and storing distilled water. Extremely low trace metal content in LDPE makes them ideal for trace metal analysis. Guaranteed leakproof†.

### details

- Extremely low trace metal content in LDPE makes them ideal for trace metal analysis
- Excellent chemical resistance to most acids, bases and alcohols make these versatile bottles
- Can be used in freezer to -100°C (-148°F) for long-term storage
- 4 and 8 L sizes feature a built-in shoulder loop for attaching identification tag
- Translucence allows easy viewing of liquid levels
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Leakproof†

**Includes:** Leakproof† polypropylene screw closures.

*Notes: Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Large Narrow-Mouth Bottles

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2202-0005	2 (1/2)	38-430	25	121	249	1	6
2202-0010	4 (1)	38-430	25	152	333	1	6
2202-0020	8 (2)	53B	37	193	409	1	6





## ► Thermo Scientific Nalgene Lab Quality Amber Narrow-Mouth Bottles

amber high-density polyethylene



**Nalgene™ Lab Quality Amber Narrow-Mouth Bottles reduce UV light transmissions to protect light-sensitive liquids.**

Useful for storage, shipping and packaging. Excellent chemical resistance to most acids, bases and alcohols.

### details

- Opaque Amber reduces UV light transmissions to protect light-sensitive liquids
- Excellent chemical resistance to most acids, bases and alcohols make these versatile bottles useful where exposure to light needs to be restricted
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Leakproof†

**Includes:** Amber polypropylene screw closures.

**Compliance:** Product meets the requirements for light-resistant containers per USP latest edition.

*Notes: Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Lab Quality Amber Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2004-9125	4 (1/8)	13	8	16	41	12	72
2004-9025	8 (1/4)	20	14	25	45	12	72
2004-9050	15 (1/2)	20	14	25	58	12	72
2004-0001	30 (1)	20	14	34	61	12	72
2004-0002	60 (2)	20	14	37	85	12	72
2004-0004	125 (4)	24	18	50	101	12	72
2004-0008	250 (8)	24	18	61	133	12	72
2004-0016	500 (16)	28	21	73	170	12	48
2004-0032	1000 (32)	38-430	27	91	216	6	24



## ► Thermo Scientific Nalgene Amber Narrow-Mouth Economy Bottles

amber high-density polyethylene



**Nalgene™ Amber Narrow-Mouth Bottles** are lightweight versions of the original Nalgene Amber Lab Quality bottle, suitable for light-duty, general purpose applications where a heavier bottle is not required.

Opaque Amber HDPE bottles reduce UV light transmissions to protect light-sensitive liquids. Useful for storage, shipping and packaging. Guaranteed leakproof†.

### details

- Opaque Amber reduces UV light transmissions to protect light-sensitive liquids
- Excellent chemical resistance to most acids, bases and alcohols make these versatile bottles useful where exposure to light needs to be restricted
- Suitable for light-duty, general purpose applications where a heavier bottle is not required
- Economical and recyclable; designed for single use
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Leakproof†

**Includes:** Amber polypropylene screw closures.

**Compliance:** Product meets the requirements for light-resistant containers per USP latest edition.

*Notes: Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Amber Narrow-Mouth Economy Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
DS2085-0001	30 (1)	20	14	34	61	72	72
DS2085-0002	60 (2)	20	14	37	86	72	72
DS2085-0004	125 (4)	24	18	50	101	72	72
DS2085-0008	250 (8)	24	18	61	133	72	72
DS2085-0016	500 (16)	28	21	73	170	48	48
DS2085-0032	1000 (32)	38-430	27	91	216	24	24



## ► Thermo Scientific Nalgene Large Amber Narrow-Mouth Bottles

amber polypropylene copolymer



**Nalgene™ Amber Narrow-Mouth reduce UV light transmissions to protect light-sensitive liquids.**

Useful for storing chemicals and standards, collecting and storing distilled water. Amber color reduces exposure to UV light.

### details

- Opaque amber reduces UV light transmissions to protect light-sensitive liquids
- Excellent chemical resistance to most acids, bases and alcohols make these versatile bottles where exposure to light needs to be restricted
- 4 and 8 L sizes feature a built-in shoulder loop on larger sizes for attaching identification tag
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Autoclavable/Leakproof†

**Includes:** Amber polypropylene screw closures, except for 8 L which includes a white PP closure with a TPE gasket.

**Compliance:** Product meets the requirements for light-resistant containers per USP latest edition.

*Notes: Completely disengage threads or remove cap before autoclaving. Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Amber Narrow-Mouth Bottles

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2204-0005	2 (1/2)	38-430	25	121	249	1	6
2204-0010	4 (1)	38-430	25	152	333	1	6
2204-0020	8 (2)	53B	37	193	409	1	6



## ► Thermo Scientific Nalgene Narrow-Mouth Bottles

polypropylene copolymer, polypropylene screw closures



**Nalgene™ Narrow-Mouth Boston Round Bottles are ideal for lab applications requiring excellent chemical resistance and autoclaving with and without contents.**

Translucence provides good clarity for viewing contents. Autoclavable. Guaranteed leakproof†.

### details

- Provides excellent chemical resistance for a variety of lab applications
- Versatile – can autoclave with and without contents for repeated use in the lab
- Translucence provides good clarity for viewing contents
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving. Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Autoclavable Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2006-9125	4 (1/8)	13	8	16	41	12	72
2006-9025	8 (1/4)	20	14	25	45	12	72
2006-9050	15 (1/2)	20	14	25	58	12	72
2006-0001	30 (1)	20	14	34	61	12	72
2006-0002	60 (2)	20	14	37	85	12	72
2006-0004	125 (4)	24	18	50	101	12	72
2006-0008	250 (8)	24	18	61	133	12	72
2006-0016	500 (16)	28	21	73	170	12	48
2006-0032	1000 (32)	38-430	27	91	216	6	24



## ► Thermo Scientific Nalgene Narrow-Mouth Economy Bottles

polypropylene copolymer, polypropylene screw closure



**Nalgene™ Narrow-Mouth Economy Bottles** are lightweight versions of the original Nalgene Lab Quality bottle, suitable for light-duty, general purpose applications where a heavier bottle is not required.

Economically priced, these bottles are designed for single use. Guaranteed leakproof†.

### details

- Economical and recyclable; designed for single use
- Translucence allows easy viewing of liquid levels
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Narrow-Mouth Economy Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2087-0001	30 (1)	20	14	34	61	72	72
2087-0002	60 (2)	20	14	37	85	72	72
2087-0004	125 (4)	24	18	50	101	72	72
2087-0008	250 (8)	24	18	61	133	72	72
2087-0016	500 (16)	28	21	73	170	48	48
2087-0032	1000 (32)	38-430	27	91	216	24	24



## ► Thermo Scientific Nalgene Large Narrow-Mouth Bottles

polypropylene copolymer, polypropylene screw closure



**Nalgene™ Large Narrow-Mouth Bottles are excellent for storing corrosive chemicals and distilled water.**

These bottles are resistant to most acids, bases and alcohols and can be autoclaved repeatedly with or without contents.

### details

- 4 and 8 L feature a built-in shoulder loop on larger sizes for attaching identification tag
- Lighter weight than glass alternatives make for easy lifting
- Translucence allows easy viewing of liquid levels
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closures. 8 L includes a white PP closure with a TPE gasket.

*Notes: Completely disengage threads or remove closure before autoclaving. Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Large Narrow-Mouth Bottles

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2203-0005	2 (1/2)	38-430	25	121	249	1	6
2203-0010	4 (1)	38-430	25	152	333	1	6
2203-0020	8 (2)	53B	37	193	409	1	6





## ► Thermo Scientific Nalgene Large Narrow-Mouth Bottles

polycarbonate, polypropylene screw closure



**Nalgene™ Large Narrow-Mouth Bottles are window-clear with excellent impact resistance.**

Good for freezer use. Guaranteed leakproof†.

### details

- Half-liter and liter sizes are good for smaller volume applications where contents need to be seen
- 2 L and 2.5 L sizes can be used as culture vessels for batch, suspension or nonattached roller culturing
- 4 L and 8 L sizes have built-in shoulder loops for attaching an identification tag
- Excellent impact resistance makes these bottles good for freezer use to -135°C (-211°F)
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Autoclavable/Transparent/Leakproof†

**Includes:** Polypropylene screw closures. 8 L size includes a white PP closure with a TPE gasket.

*Notes: Before autoclaving, completely disengage threads or remove cap. Autoclave empty. Repeated autoclaving will shorten the bottle life.*

### Nalgene Narrow-Mouth Bottles

Cat. No.	Capacity, L	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2205-0016	.5	38-430	27	82	180	4	24
2205-0032	1	38-430	27	99	221	4	24
DS2205-0210	2	38-430	25	121	249	1	1
DS2205-0250	2.5	38-430	25	121	295	1	1
DS2205-0010	4	38-430	25	152	333	1	1
DS2205-0020	8	53B	37	193	409	1	1



## ► Thermo Scientific Nalgene Wide-Mouth Rectangular Bottles

high-density polyethylene, polypropylene screw closure



**Nalgene™ Wide-Mouth Rectangular Bottles feature a space-saving rectangular design that takes up less shelf space than traditional round bottles.**

### details

- Excellent chemical resistance to most acids, bases and alcohols make these excellent containers to protect your valuable samples
- Rectangular shape makes it easy to fit in freezer for storage up to -100°C (-148°F)
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- A sturdy, uniform wall construction with straight sides and a wide mouth that are resistant to splitting or punctures
- Leakproof†

**Includes:** Polypropylene screw closures.

### Nalgene Wide-Mouth Rectangular Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2007-0004	125 (4)	28	21	61 x 38	102	12	72
2007-0008	250 (8)	38	28	76 x 51	117	12	72
2007-0016	500 (16)	48	37	94 x 60	147	12	48
2007-0032	1000 (32)	53	44	125 x 71	180	6	24
2007-0064	2000 (64)	63	51	152 x 84	242	4	12



## ► Thermo Scientific Nalgene Amber Wide-Mouth Rectangular Bottles

high-density polyethylene, amber polypropylene screw closure



**Nalgene™ Amber Wide-Mouth Rectangular Bottles help protect light-sensitive liquids or dry materials from exposure and take up less shelf space than traditional round bottles.**

### details

- Amber HDPE reduces UV light transmissions to protect light-sensitive liquids
- Rectangular shape is great for space-saving use in the freezer to -100°C (-148°F)
- Excellent chemical resistance to most acids, bases and alcohols make these excellent containers to protect your valuable samples
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Leakproof†

**Includes:** Opaque amber polypropylene screw closures.

**Compliance:** Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Amber Wide-Mouth Rectangular Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2009-0004	125 (4)	28	21	61 x 38	102	12	72
2009-0008	250 (8)	38	28	76 x 51	117	12	72
2009-0016	500 (16)	48	37	94 x 60	147	12	48
2009-0032	1000 (32)	53	44	125 x 71	180	6	24
2009-0064	2000 (64)	63	51	152x84	242	4	12



## ► Thermo Scientific Nalgene Narrow-Mouth Square Bottles

polycarbonate, polypropylene screw closure



**Nalgene™ Narrow-Mouth Square Bottles are durable and autoclavable, and feature an easy-to-handle square design.**

Ideal for storage of aqueous solutions and short-term storage of media.

### details

- This product can be autoclaved in your lab for repeated sterilization and decontamination – autoclave only when empty.
- Square sides allow for good use of space in the freezer to -135°C (-275°F)
- Excellent clarity make these bottles ideal for general purpose storage of aqueous solutions and short-term storage of media
- 2 L size has molded-in handgrips to aid in lifting and pouring contents
- Molded-in graduations for ease in dispensing
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Guaranteed leakproof†
- Autoclavable/Transparent/Graduated

**Includes:** Leakproof† polypropylene screw closures.

*Notes: Remove cap or completely disengage threads before autoclaving. Autoclave empty. Repeated autoclaving will shorten bottle life.*

### Nalgene Narrow-Mouth Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm <sup>2</sup>	Height with Closure, mm	No. per Pack	No. per Case
2015-0030	30 (1)	20	14	38	64	12	96
2015-0060	60 (2)	24	18	41	83	12	96
2015-0125	125 (4)	38-430	28	53	109	6	48
2015-0250	250 (8)	38-430	28	61	146	6	48
2015-0500	500 (16)	38-430	28	74	178	4	24
2015-1000	1000 (32)	38-430	28	92	218	4	24
2015-2000	2000 (64)	53B	39	116	271	1	6



► **Thermo Scientific Nalgene Square Bottles**  
polypropylene copolymer with polypropylene closures



**Nalgene™ Square Bottles are graduated, repeatedly autoclavable; resistant to alcohols and bases, and is translucent.**

Space-saving square bottles have well-proportioned mouths for easy measuring and dispensing.

**details**

- Square sides allow for good use of space and an easy grip
- Graduated for ease of dispensing
- Linerless caps provide the ultimate in leakproof<sup>†</sup> protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Translucent bottles provide visible liquid level
- Useful between 0° and 135°C (32° and 275°F)
- Autoclavable/Leakproof<sup>†</sup>

**Includes:** Leakproof<sup>†</sup> polypropylene screw closures.

*Notes: Remove cap or completely disengage threads before autoclaving.*

**Nalgene Narrow-Mouth Square Bottles**

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D. <sup>2</sup> , mm	Height with Closure, mm	No. per Pack	No. per Case
2016-0030	30 (1)	20	14	38	64	12	72
2016-0060	60 (2)	24	18	41	83	12	72
2016-0125	125 (4)	38-430	28	53	109	12	72
2016-0250	250 (8)	38-430	28	61	146	12	72
2016-0500	500 (16)	38-430	28	74	178	12	48
2016-1000	1000 (32)	38-430	28	92	218	6	24



## ► Thermo Scientific Nalgene Narrow-Mouth Square Bottles

high-density polyethylene, polypropylene screw closure



**Nalgene™ Narrow-Mouth Square Bottles are the most chemically and break resistant of all Nalgene square bottles, yet are economically priced for a wide range of lab uses.**

### details

- Square sides allow for good use of space and an easy grip
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Graduated for ease of dispensing
- Can be used to -100°C (-148°F)
- Most chemical- and break-resistant of all Nalgene square bottles, yet economically priced for a wide range of lab uses
- Leakproof†/Graduated

**Includes:** Leakproof polypropylene screw closures.

*Notes: Nalgene LDPE, HDPE, PP and PMP containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Narrow-Mouth Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm <sup>2</sup>	Height with Closure, mm	No. per Pack	No. per Case
2018-0030	30 (1)	20	14	38	64	12	72
2018-0060	60 (2)	24	18	41	83	12	72
2018-0125	125 (4)	38-430	28	53	109	12	72
2018-0250	250 (8)	38-430	28	61	146	12	72
2018-0500	500 (16)	38-430	28	74	178	12	48
2018-1000	1000 (32)	38-430	28	92	218	6	24





## ► Thermo Scientific Nalgene Autoclavable Septum Closures

polypropylene closure, thermoplastic elastomer septum



**Nalgene™ Autoclavable Septum Closures** allow aseptic injection of reagent or sample withdrawal without compromising sterility or integrity of contents.

Suitable for use with any bottle or container with 38-430 neck, including Nalgene culture vessels.

### details

- Use with 18-gauge or smaller needles for aseptic injection of reagent or sample withdrawal without compromising sterility or integrity of contents
- Fits Nalgene bottles with 38-430 threaded mouth
- Autoclavable

*Notes: For laboratory use only; not for in vitro diagnosis or parenterals.*

### Nalgene Autoclavable Septum Closure

Cat. No.	Description	Closure Size, mm	No. per Case
DS2168-0384	Autoclavable Septum Closures	38-430	12





## ► Thermo Scientific Nalgene Wide-Mouth Square Bottles

polypropylene copolymer, polypropylene screw closures



**Nalgene™ Wide-Mouth Square Bottles feature a wide-mouth design for easy cleaning, sample filling and retrieval.**

Save valuable lab space with a square design. Repeatedly autoclavable.

### details

Resistant to acids, alcohols and bases

- Contact-clear bottle provides visible liquid level
- Square design allows good use of space and provides a large area for labeling
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Wide-Mouth Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm <sup>2</sup>	Height with Closure, mm	No. per Pack	No. per Case
2110-0002	60 (2)	28	21	36	83	12	72
2110-0006	175 (6)	38	28	51	102	12	72
2110-0008	250 (8)	43	33	61	116	12	72
2110-0016	500 (16)	53	43	74	146	12	48
2110-0032	1000 (32)	63	53	95	181	6	24

## ► Thermo Scientific Nalgene Large Wide-Mouth Square Bottle

polypropylene copolymer, polypropylene screw closures



**Nalgene™ Large Wide-Mouth Square Bottles** are ideal for autoclaving and storing contaminated slides and other small lab equipment. Excellent for collecting, storing and transporting dry chemicals and environmental samples.

Space-saving design features molded-in handgrips for greater convenience and safety when pouring.

### details

- Ideal for storing contaminated slides and other small lab equipment
- Space-saving bottle design features molded-in handgrips for greater convenience and safety when pouring
- Wide mouth makes it excellent for collecting, storing and transporting dry chemicals and environmental samples
- Autoclavable

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving. This bottle is not liquid leakproof.*

### Nalgene Large Wide-Mouth Square Bottle

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm <sup>2</sup>	Height with Closure, mm	No. per Pack	No. per Case
2122-0010	4 (1)	100	89	142	282	1	6

### ► Select the perfect container for your application.

Go to: [www.thermoscientific.com/nalgenecontainers](http://www.thermoscientific.com/nalgenecontainers)  
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– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Wide-Mouth Square Bottles

high-density polyethylene, polypropylene screw closures



**Nalgene™ Wide-Mouth Square Bottles feature durable, uniform walls resistant to splitting or puncturing.**

Easy-to-grip bottles save valuable storage space.

### details

- Wide mouth is easy to fill
- Space-saving bottle design saves space in freezer – store samples to -100°C (-148°F)
- HDPE exhibits excellent chemical resistance to most acids, bases and alcohols making these bottles suitable for a wide variety of uses
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Leakproof†

**Includes:** Polypropylene screw closure.

### Nalgene Wide-Mouth Square Bottle

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D.	O.D., mm <sup>2</sup>	Height With Closure	No. per Pack	No. per Case
2114-0002	60 (2)	28	21	36	83	12	72
2114-0006	175 (6)	38	28	51	106	12	72
2114-0008	250 (8)	43	33	61	116	12	72
2114-0016	500 (16)	53	43	74	146	12	48
2114-0032	1000 (32)	63	53	95	181	6	24

## ► Thermo Scientific Nalgene Large Wide-Mouth Square Bottle

high-density polyethylene, white polypropylene screw closures



**Nalgene™ Large Wide-Mouth Square Bottles feature molded-in handgrips that provide greater convenience and safety when pouring.**

Excellent for collecting, storing and transporting dry chemicals and environmental samples.

### details

- Wide mouth allows easy access to contents
- Space-saving bottle features convenient, molded-in handgrips for greater convenience and safety when pouring
- Excellent chemical resistance to most acids, bases and alcohols making these bottles suitable for storing and transporting dry chemicals, environmental samples, reagents and distilled water
- Space-saving bottle design saves space in freezer – store samples to -100°C (-148°F)

*Notes: This bottle is not liquid leakproof.*

### Nalgene Large Wide-Mouth Square Bottle

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm <sup>2</sup>	Height with Closure, mm	No. per Pack	No. per Case
2123-0010	4 (1)	100	89	142	292	1	6

## ► Thermo Scientific Nalgene Dilution Bottles

polypropylene copolymer, polypropylene screw closure



**Nalgene™ PPCO Dilution Bottles offer excellent chemical resistance to strong acids, alcohols and bases. Bottles are contact-clear so that liquid levels are easy to read.**

### details

- Excellent chemical resistance to strong acids, alcohols and bases – ideal for use with a wide variety of solutions
- Useful for a wide range of temperatures -40°C (-40°F) to +121°C (250°F)
- Translucent, so you can read graduations at both 90 mL (for 0.1 dilutions) and 99 mL (for 0.01 dilutions) accurate to ±0.4 mL
- Withstands repeated washing and autoclaving with Tween
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closure.

*Notes: Completely disengage threads or remove cap before autoclaving.*

Nalgene Dilution Bottles

Cat. No.	Capacity to Brim, mL	Capacity to Neck, mL	Closure Size, mm	No. per Pack	No. per Case
2500-0280	210	200	28	12	48
2500-0380	220	205	38	12	48

## ► Thermo Scientific Nalgene Dilution Bottles

Polysulfone, polypropylene screw closure



**Nalgene™ Polysulfone Dilution Bottles are our clearest and most accurate dilution bottles.**

### details

- Excellent chemical resistance to bases and weak acids – ideal for use with food products
- Useful for a wide range of temperatures -100°C (148°F) to +165°C (329°F)
- Transparent, so its easy to read graduations at both 90 mL (for 0.1 dilutions) and 99 mL (for 0.01 dilutions) accurate to ±0.1 mL
- Autoclaving when used with Tween will reduce the life of this dilution bottle
- Autoclavable/Transparent/Leakproof†

**Includes:** Polypropylene screw closure.

*Notes: Completely disengage threads or remove cap before autoclaving.*

Nalgene Dilution Bottles

Cat. No.	Capacity to Brim, mL	Capacity to Neck, mL	Closure Size, mm	No. per Pack	No. per Case
2505-0280	210	200	28	12	48
2505-0380	220	205	38	12	48



## ► Thermo Scientific Nalgene Narrow-Mouth Passport IP2 Bottles

high-density polyethylene, polypropylene screw closure



Excellent for small-scale inter-lab shipping of hazardous samples and chemicals such as corrosives and cleaning compounds.

### details

- Recommended for customers designing, certifying or assembling their own combination packaging
- Heavy-duty walls resist splitting and puncturing
- Markings molded into bottom of bottles: IP2 marking, material, volume, registration notch
- Evaluated at 15 psi (103 kPa) per 49 CFR 173.27 (c)(2), ICAO Technical Instructions Part 4; 1.1.6, and IATA Dangerous Goods Regulations Section 5.0.2.9
- Leakproof†

**Includes:** Polypropylene screw closures.

**Compliance:** Meets IATA Dangerous goods Regulations Section 5.0.2.9.

### Nalgene™ Narrow-Mouth Passport IP2 Bottles

Cat. No.	Capacity, mL	No. per Pack	No. per Case
2099-0001	30	12	72
2099-0002	60	12	72
2099-0004	125	12	72
2099-0008	250	12	72

## ► Thermo Scientific Nalgene Wide-Mouth Passport IP2 Bottles

high-density polyethylene, polypropylene screw closure



Safe, durable cost-effective line of wide-mouth bottles for packaging and transporting hazardous samples and chemicals such as corrosives and cleaning compounds

### details

- Wide-mouth for easy filling with fluids or powders
- Recommended for customers designing, certifying or assembling their own combination packaging
- Heavy-duty walls resist splitting and puncturing
- Markings molded into bottom of bottles: IP2 marking, material, volume, registration notch
- Evaluated at 15 psi (103 kPa) per 49 CFR 173.27 (c)(2), ICAO Technical Instructions Part 4; 1.1.6, and IATA Dangerous Goods Regulations Section 5.0.2.9
- Leakproof†

**Includes:** Polypropylene screw closures.

**Compliance:** Meets IATA Dangerous goods Regulations Section 5.0.2.9.

Cat. No.	Capacity, mL	No. per Pack	No. per Case
2199-0004	125	12	72
2199-0008	250	12	72
2199-0016	500	12	48
2199-0032	1000	6	24





## ► Thermo Scientific Nalgene Low Particulate/Low Metals Bottles

low-density polyethylene, polypropylene closure



**Nalgene™ Low Particulate/Low Metals Bottles feature a narrow mouth and certification to contain less than 20 particles per mL at 0.3 microns and greater.**

Metals certified to micrograms per liter (ppb) levels. Each bottle is double bagged under Class 10 laminar flow hoods inside a Class 100 clean room. Excellent for ICP-MS reagent and standard storage. Product includes a certificate of quality that assures the product has been tested and accepted in accordance with specifications.

### details

- Certified to particulate and trace metals levels
- Linerless caps provide the ultimate in leakproof protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Exhibits flexibility, impact resistance and excellent visibility of contents for a wide variety of uses in the lab
- Excellent chemical resistance to most acids, bases and alcohols make this a versatile bottle
- Metals certified to microliter (ppb) levels <0.20Hg, <0.5 Be, <1.0 As, Cd, Pb, <2.0 Sb, Se, <5.0 Ag, Co, Cr, Cu, Mn, Ti, V, <10 Ba, Ni, Zn, <50 Mg, <75 Al, <100 Ca, Fe, K, Na.
- Translucent/Leakproof†

**Includes:** Polypropylene screw closure.

**Nalgene Low Particulate/Low Metals Bottles**

Cat. No.	Capacity, mL (oz)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
382003-0004	125 (4)	24	18	50	101	1	72
382003-0008	250 (8)	24	18	61	133	1	72
382003-0016	500 (16)	28	21	73	170	1	48
382003-0032	1000 (32)	38-430	27	91	216	1	24



## ► Thermo Scientific Nalgene Low Particulate/Low Metals Bottles

Teflon® FEP, Tefzel™ ETFE closure



**Nalgene™ Low Particulate/Low Metals Teflon® FEP Bottles feature a narrow mouth and certification to contain less than 20 particles per mL at 0.3 µm and greater**

Metals certified to micrograms per liter (ppb) levels. Each bottle is double bagged under Class 10 laminar flow hoods inside a Class 100 clean room. Excellent for storing high purity chemicals. Product includes a certificate of quality that assures the product has been tested and accepted in accordance with specifications.

### details

- Certified to particulate and trace metals levels
- Linerless caps provide the ultimate in leakproof<sup>†</sup> protection without the use of liner that can wrinkle, cause leaks, or contaminate your reagents
- Exhibits flexibility, impact resistance and excellent visibility of contents for a wide variety of uses in the lab
- Excellent chemical resistance almost any lab chemical
- Non-sterile
- Metals certified to microliter (ppb) levels <0.20Hg, <0.5 Be, <1.0 As, Cd, Pb, <2.0 Sb, Se, <5.0 Ag, Co, Cr, Cu, Mn, Tl, V, <10 Ba, Ni, Zn, <50 Mg, <75 Al, <100 Ca, Fe, K, Na.
- Autoclavable/Translucent/Leakproof<sup>†</sup>

**Includes:** ETFE screw closure.

*Notes: Completely disengage threads or remove cap before autoclaving.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Low Particulate/Low Metals Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
381600-0004	125 (4)	24	17	46	115	1	6
381600-0008	250 (8)	24	17	60	134	1	4
381600-0016	500 (16)	28	20	73	166	1	4
381600-0032	1000 (32)	38	26	90	203	1	4



## ► Thermo Scientific Nalgene Narrow-Mouth Bottles

Teflon® FEP, Tefzel™ ETFE closure



**Nalgene™ FEP Narrow-Mouth Bottles are the most inert, chemical-resistant, corrosion-resistant containers available.**

Outstanding resistance to virtually all chemicals and extreme temperatures. Ideal for trace metal analysis and applications involving organic solvents. Can be rigorously cleaned in boiling nitric acid. Guaranteed leakproof†.

### details

- Most inert, chemical-resistant, corrosion-resistant containers available – ideal for trace metal analysis and applications involving organic solvents
- Can withstand rigorous cleaning in boiling nitric acid – temperature range from -105°C (-157°F) to +150°C (+302°F) for a wide range of uses including high-purity storage. Can be autoclaved for sterilization
- Autoclavable/Leakproof†/Transparent/Teflon® FEP

**Includes:** ETFE screw closure.

*Notes: These bottles cannot withstand gamma irradiation. Completely disengage threads or remove cap before autoclaving.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
1600-0001	30 (1)	20	14	32	75	1	8
1600-0002	60 (2)	20	14	39	84	1	8
1600-0004	125 (4)	24	17	46	115	1	6
1600-0008	250 (8)	24	17	60	134	1	4
1600-0016	500 (16)	28	20	73	166	1	4
1600-0032	1000 (32)	38	26	90	203	1	4
1600-0064	2000 (64)	38-430	24	121	245	1	2



## ► Thermo Scientific Nalgene Narrow-Mouth Bottles

Teflon® PFA, Teflon® PFA screw closure screw closure



**Nalgene™ Narrow-Mouth Bottles, Teflon® PFA; Teflon® PFA screw closure**  
Thermo Scientific Nalgene PFA Narrow-Mouth Bottles are the most temperature resistance, inert, chemical-resistant, corrosion-resistant containers available.

Outstanding resistance to virtually all chemicals and extreme temperatures. Ideal for trace metal analysis and applications involving organic solvents. Can be rigorously cleaned in boiling nitric acid. Guaranteed leakproof†.

### details

- Withstand -270° to +250°C (-454° to +482°F)
- Inert to virtually all chemicals except molten alkali metals, fluorine at high temperatures, and complex halogenated compounds at high temperatures and pressures
- Packaged individually
- Autoclavable
- Leakproof† PFA closure

**Includes:** Leakproof†, linerless PFA screw closures.

*Notes: These bottles cannot withstand gamma irradiation. Completely disengage threads or remove cap before autoclaving.*

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### Nalgene Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
DS1630-0001	30 (1)	20	14	32	75	1	8
DS1630-0002	60 (2)	20	14	39	84	1	8
1630-0004	125 (4)	38-430	24	46	127	1	6
1630-0008	250 (8)	38-430	24	59	146	1	4
1630-0016	500 (16)	38-430	24	72	181	1	4
1630-0032	1000 (32)	38-430	24	90	216	1	4



## ► Thermo Scientific Nalgene Wide-Mouth Bottles

Teflon® FEP, Tefzel™ ETFE closure



**Nalgene™ FEP Bottles with ETFE closures provide excellent temperature and chemical resistance.**

Outstanding resistance to virtually all chemicals and extreme temperatures. Ideal for trace metal analysis and applications involving organic solvents. Can be rigorously cleaned in boiling nitric acid. Guaranteed leakproof<sup>†</sup>.

### details

- Most inert, chemical-resistant, corrosion-resistant containers available – ideal for trace metal analysis and applications involving organic solvents
- Can withstand rigorous cleaning in boiling nitric acid – temperature range from -105°C (-157°F) to +150°C (+302°F) for a wide range of uses including high-purity storage. Can be autoclaved for sterilization
- Wide-mouth for easy filling
- Autoclavable/Leakproof<sup>†</sup>/Transparent/Teflon® FEP

**Includes:** ETFE screw closure.

*Notes: These bottles cannot withstand gamma irradiation. Completely disengage threads or remove cap before autoclaving.*

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### Nalgene Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2100-0004	125 (4)	33	25	46	117	1	6
2100-0008	250 (8)	43	33	59	128	1	4
2100-0016	500 (16)	48	38	71	165	1	4
2100-0032	1000 (32)	53	43	91	209	1	4



## ► Thermo Scientific Nalgene Wide-Mouth EP Tox/TCLP Bottle

Teflon® FEP, Teflon® PFA lined white polypropylene closure



**Nalgene™ Wide-Mouth EP Tox Bottles are ideal to use at high and low temperatures for trace metal analysis and applications with organic solvents.**

Offers laboratory a safer alternative to glass.

### details

- 2.2 L temperature-resistant PTFE resin FEP bottle has wide mouth for testing large-sized samples
- PTFE resin-lined polypropylene caps included
- Specially designed for U.S. EPA Method 1311: Toxicity Characteristic Leaching Program (TCLP)
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closure with PFA lining.

*Notes: This bottle cannot withstand gamma irradiation. Completely disengage threads before autoclaving.*

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### Nalgene Wide-Mouth EP Tox/TCLP Bottle

Cat. No.	Capacity, L	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2101-2200	2.2	100	89	119	241	1	2





## ► Thermo Scientific Nalgene Fluorinated Narrow-Mouth Bottles

fluorinated high-density polyethylene; fluorinated polypropylene screw closure



**Nalgene™ Narrow-Mouth Fluorinated bottles are fluorinated inside and out for improved barrier properties and reduced solvent absorption and permeation.**

Fluorination enhances long-term container performance, prevents permeation loss and yields lower extractables. Provides a cost-effective alternative to costly fluoropolymer containers. Guaranteed leakproof†.

### details

- Fluorinated to enhance long-term performance and prevent solvent permeation loss
- Constructed with heavy-duty walls that are safe, durable and resistant to splitting and punctures
- Leakproof†

**Includes:** fluorinated polypropylene screw closures.

Nalgene Fluorinated Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2097-0008	250 (8)	24	18	61	133	12	72
2097-0016	500 (16)	28	21	73	170	12	48
2097-0032	1000 (32)	38-430	27	91	216	6	24
2097-0005	2000 (67)	38-430	27	120	250	1	6
2097-0010	4000 (135)	38-430	26	153	334	1	6

### ► Select the perfect container for your application.

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or download our free apps from iTunes or the Android market  
– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Fluorinated Wide-Mouth Bottles

fluorinated high-density polyethylene, fluorinated polypropylene screw closure



**Nalgene™ Fluorinated Wide-Mouth bottles are fluorinated inside and out for improved barrier properties and reduced solvent absorption and permeation.**

Fluorination enhances long-term container performance, prevents permeation loss and yields lower extractables. Provides a cost-effective alternative to costly fluoropolymer containers. Wide-mouth allows easy access. Guaranteed leakproof†.

### details

- Fluorinated to enhance long-term performance and prevent solvent permeation loss
- Constructed with heavy-duty walls that are safe, durable and resistant to splitting and punctures
- Leakproof†

**Includes:** fluorinated polypropylene screw closures.

#### Nalgene Fluorinated Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2197-0004	125 (4)	38	28	50	99	12	72
2197-0008	250 (8)	43	33	61	131	12	72
2197-0016	500 (16)	53	44	73	168	12	48
2197-0032	1000 (32)	63	53	91	199	6	24

## ► Thermo Scientific Nalgene Fluorinated Large Wide-Mouth Bottle

fluorinated high-density polyethylene, fluorinated polypropylene screw closure



**Nalgene™ bottle with Fluorinated Surface enhances long-term performance and prevents permeation loss.**

Fluorinating these HDPE bottles provides a cost-effective alternative to costly fluoropolymer containers.

Enhances long-term performance and prevents permeation loss.

### details

- Fluorinated to enhance long-term performance and prevent solvent permeation loss
- Wide mouth allows access
- Yields lower extractables than other bottles

**Includes:** fluorinated polypropylene screw closures.

*Notes: This bottle is not liquid leakproof.*

#### Nalgene Fluorinated Large Wide-Mouth Bottle

Cat. No.	Capacity, L	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2124-0005	2.2	100	89	119	244	1	6



## ► Thermo Scientific Nalgene Pour Spout

polypropylene, polyethylene insert



**Nalgene™ pour spout is made to fit all Nalgene bottles with 38-430 neck finish. Vented to allow smooth flow for easy liquid dispensing.**

### details

- Used for all Nalgene bottles with 38-430 neck finish
- Allows easy one-handed liquid dispensing without leaving bottles completely open to the environment

### Nalgene Pour Spout

Cat. No.	Description	Closure Size, mm	No. per Case
DS2176-0384	Pour Spout	38-430	6

## ► Thermo Scientific Nalgene Autoclavable Septum Closures

polypropylene closure, thermoplastic elastomer septum



**Nalgene™ Autoclavable Septum Closures allow aseptic injection of reagent or sample withdrawal without compromising sterility or integrity of contents.**

Suitable for use with any bottle or container with 38-430 neck, including Nalgene culture vessels.

### details

- Use with 18-gauge or smaller needles for aseptic injection of reagent or sample withdrawal without compromising sterility or integrity of contents
- Fits Nalgene bottles with 38-430 threaded mouth
- Autoclavable

*Note: For laboratory use only; not for in vitro diagnosis or parenterals.*

### Nalgene Autoclavable Septum Closure

Cat. No.	Description	Closure Size, mm	No. per Case
DS2168-0384	Autoclavable Septum Closures	38-430	12

**Thermo Scientific Products –**  
*meeting the challenges of science and industry*

# Nalgene™ Bottles and Carboy Selection Guide

**Thermo Scientific Nalgene Bottle, Carboy and Vial Selection Guide**

It's easy to take for granted the containers you interact with your valuable samples and solutions. But not all bottles are created equal. Nalgene is the #1 choice, with more than 3,000,000 used at work in laboratories around the world. This guide will help you to select a container matching your needs. Enter your criteria and see the range of Thermo Scientific Nalgene bottles that match your criteria.

**Found 673 bottles matching your criteria - scroll down to view the results**

Chemical Compatibility	Storage Time	Material/Resin
None	Any	Any
Application Temperature Range	Min. temp. (degrees centigrade)	Max. temp. (degrees centigrade)
(Ambient room temperature)	(Ambient room temperature)	(Ambient room temperature)
Certifications	Any	Yes
Low Particulate	Any	Yes
ADC Free	Any	Yes
RNAse/DNAse Free	Any	Yes
Non-cytotoxic	Any	Yes
Non-pyrogenic	Any	Yes
Low volatile	Any	Yes
Air shipment	Any	Yes
Standard Quality Certificate	Any	Yes

Search Catalog Number: (If you already have a catalog number, enter it here and click "Go")  
view product specifications.

Cat. No.	Description	Quantity/Minimum Order	Material
1600-0001	Narrow-Mouth Bottle FEP	30 mL	FEP
1600-0002	Narrow-Mouth Bottle FEP	60 mL	FEP
1600-0004	Narrow-Mouth Bottle FEP	125 mL	FEP
1600-0008	Narrow-Mouth Bottle FEP	250 mL	FEP
1600-0016	Narrow-Mouth Bottle FEP	500 mL	FEP
1600-0033	Narrow-Mouth Bottle FEP	1000 mL	FEP
1600-0064	Narrow-Mouth Bottle FEP	2000 mL	FEP
1630-0004	Narrow-Mouth Bottle PFA	125 mL	PFA
1630-0008	Narrow-Mouth Bottle PFA	250 mL	PFA
1630-0016	Narrow-Mouth Bottle PFA	500 mL	PFA
1630-0033	Narrow-Mouth Bottle PFA	1000 mL	PFA

Thermo Scientific Nalgene bottles and carboys set the standard for quality and superior performance, protecting your valuable liquids. So exceptional, they come with a leakproof guarantee. So trusted, millions are used in laboratories around the world.

**See how easy it is to choose the best bottles, carboys and vials for your applications.**

**Visit the Nalgene Bottle and Carboy Selection Guide**  
by using the QR code below or online at

**[www.thermoscientific.com/nalgenecontainers](http://www.thermoscientific.com/nalgenecontainers)**

– or get the app at the iTunes store or Android Market.





## ► Thermo Scientific Nalgene Narrow-Mouth and Wide-Mouth Bottle Replacement Closures



### details

- Made to fit Nalgene Narrow-Mouth and Wide-Mouth Bottles

#### Nalgene Bottle Replacement Closures

Cat. No.	Closure Size, mm	Description	No. per Pack	No. per Case
712150-0240	24	PP	12	12
712150-0280	28	PP	12	12
712150-0430	43	PP	12	12
712150-0530	53	PP	12	12
712150-0630	63	PP	12	12
712150-1000	100	White PP	12	12
712151-0200	20	HDPE	12	12
712151-0380	38	HDPE	12	12
712160-0384	38-430	PP	12	12
712171-0530	53	Amber PP	12	12
712172-0020	20	PFA	2	12
712174-0530	53	ETFE	2	12



## ► Thermo Scientific Nalgene Graduated Bucket

high-density polyethylene



**Nalgene™ Buckets feature a wide-lipped pour spout and polyethylene-coated handle.**

Chemically compatible with a wide range of lab reagents. Heavy duty construction for years of rugged use. Ideal for transfer of laboratory solutions and powders.

### details

- High-density polyethylene construction offers more durability than hard rubber
- Polyethylene-coated wire bail handle provides a comfortable and sturdy grip
- Molded-in graduations in pints and liters are easy-to-read
- Graduated

#### Nalgene Graduated Bucket

Cat. No.	Capacity, L (gal.)	No. per Pack	No. per Case
7002-0025	9.5 (2-1/2)	1	6

## ► Thermo Scientific Nalgene Autoclavable Graduated Buckets

white polypropylene



**Nalgene™ graduated, autoclavable buckets are ideal for use in food industries and can be used for many chemicals and corrosive liquids.**

These general purpose laboratory buckets are fully autoclavable and provide excellent chemical resistance. Sturdy construction and convenient tall size make these buckets a lab necessity.

### details

- White polypropylene pails offer sturdy construction for long-lasting use in the lab
- Nylon-coated wire bail handle provides a comfortable and sturdy grip
- Molded-in graduated in pints and liters are easy-to-read
- Autoclavable/Graduated

#### Nalgene Autoclavable Graduated Buckets

Cat. No.	Capacity, L (qt.)	No. per Pack	No. per Case
7012-0080	7.6 (8)	1	6
7012-0110	10.4 (11)	1	6
7012-0140	13.2 (14)	1	6



## ► Thermo Scientific Nalgene Buckets with Lids

low-density polyethylene, nylon coated wire bail



**Nalgene™ Buckets with air-tight lids meet OSHA standards for storage of bloodborne pathogens.**

These air-tight buckets are ideal for storing specimens in formalin and other preservatives. Excellent for no-splash transport around the lab. Chemically-resistant to a wide range of lab solutions.

### details

- White air-tight polyethylene cover is close-fitting, making these pails ideal for storing specimens in formalin and other preservatives
- Nylon-coated wire bail handle provides a comfortable and sturdy grip
- Molded-in graduated in pints and liters are easy-to-read
- Graduated

**Compliance:** Meets OSHA 29CFR 1910.1030 standard for use as protection against bloodborne pathogens.

### Nalgene Buckets with Lids

Cat. No.	Capacity, L (qt.)	Height with Closure, cm (in.)	No. per Pack	No. per Case
7102-0080	7.6 (8)	26.7 (10-1/2)	1	12
7102-0140	13.2 (14)	32.8 (12-9/10)	1	6

## ► Thermo Scientific Nalgene Large Cylindrical Containers with Covers

high-density polyethylene



**Nalgene™ Large Cylindrical HDPE Containers are ideal for storing and transporting dry and solid materials, specimens and general lab supplies.**

Containers are stackable and have positive-lock lids that seal tight for storing both dry and solid materials.

### details

- High-density polyethylene containers provide excellent chemical and temperature resistance protecting contents from contamination
- Easy-grip molded-in handles are comfortable and durable for lifting and moving
- Positive-lock lid provides a tight seal for transport or storage

**Certifications:** National Sanitation Foundation (NSF) approved for food and beverage storage.

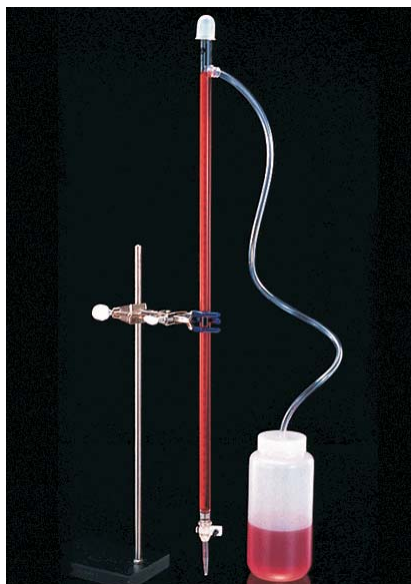
### Nalgene Large Cylindrical Containers with Covers

Cat. No.	Capacity, L (gal.)	O.D. x H, cm (in)	No. per Pack	No. per Case
7142-0015	15 (4)	30.5 x 24 (12 x 9.5)	1	6
7142-0020	20 (5.3)	30.5 x 38 (12 x 15)	1	6
7142-0030	30 (8)	39 x 30.5 (15.5 x 12)	1	6



## ► Thermo Scientific Nalgene Break-Resistant Self-Zeroing Automatic Burets

acrylic body, PMP stopcock and tip, Teflon® TFE plug, polyvinyl chloride tubing, low-density polyethylene bottle



**Nalgene™ Break-Resistant Self-Zeroing Burets offer repeatable, accurate results.**

Crystal clear, durable, easy to use, safer than glass.

### details

- Individually calibrated to meet accuracy of ASTM\* E287 for repeatable, accurate results
- Can be used with dilute mineral acids and bases except hydrofluoric acid and ammonium hydroxide
- pH range of 1-14 is ideal; compatible with up to 5% wt/wt acids and up to 30% bases accommodating a wide range of titrants
- Comes complete with everything you need to get started: acrylic buret, LDPE squeeze bottle assembly, 3 ft. (91 cm) PVC tubing, and buret cover
- Transparent/Graduated

**Compliance:** ASTM E 287

*Disclaimer: Not for use with alcohols and organic solvents. Exposure to these solutions will cause immediate damage.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Break-Resistant Self-Zeroing Automatic Burets

Cat. No.	Capacity, mL	Reservoir, mL	Graduations, mL	Tolerance, mL	No. per Pack	No. per Case
3640-0010	10	500	0.1	±0.04	1	4
3640-0025	25	500	0.1	±0.06	1	4
3640-0050	50	1000	0.1	±0.10	1	4



## ► Thermo Scientific Nalgene Self-Zeroing Buret Filler Kit

low-density polyethylene bottle, PVC tubing, polypropylene fill tube and adapter



**The Nalgene™ Self-Zeroing Buret Filler Kit converts any conventional glass or plastic 25 or 50 mL buret into an automatic-filling, self-zeroing buret to save time and convenience.**

Avoid messy spills from manual filling or funneling reagents into the top of the buret. The squeeze bottle is the reservoir for your titrant which is delivered into the mouth of buret through the provided clear PVC tubing.

### details

- Reverse adapter plug to switch from 25 to 50 mL buret or to store or transport titrating reagents
- Squeeze bottle closure without dispensing port also included for storing titrant in the bottle or field transport
- Converts any bottle into an automatic-filling, self-zeroing buret

**Directions for Use:** Connect the PP fill tube to the end of the transfer tubing and insert tubing into the mouth of the buret using the adapter provided. Adjust the fill tube tip so it is just above the zero mark of your buret. Squeeze the bottle to fill the buret above the zero mark. when you release the squeeze on the bottle, the excess titrant will be drawn back into the reservoir bottle, leaving the titrant level in the buret at the zero line.

**Includes:** 1000 mL low-density polyethylene squeeze bottle, 4 ft. length (1.2 m) of clear, flexible PVC tubing, fill tube, adapter, and closure for reagent bottle.

*Disclaimer: Buret not included.*

### Nalgene Self-Zeroing Buret Filler Kit

Cat. No.	Description	No. per Pack	No. per Case
3645-2550	Self-zeroing Buret Filler Kit	1	4



## ► Thermo Scientific Nalgene Burets

acrylic body, polymethylpentene tip; Teflon® TFE (tetrafluoroethylene) stopcock and plug



**Nalgene™ break-resistant burets offer repeatable, accurate results.**

Crystal clear, durable, easy to use, safer than glass. For use with acids and bases (use as directed).

### details

- Buret is durable and unaffected by diluted acids and bases (except hydrofluoric acid and ammonium hydroxide) used as titrants
- pH range of 1-14 is ideal; compatible with up to 5% wt/wt acids and up to 30% bases accomodating a wide range of tirants
- Transparent/Graduated

**Compliance:** ASTM E 287, Class B

*Notes: Not for use with alcohols and organic solvents. Exposure to these solutions will cause immediate damage.*

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### Nalgene Burets

Cat. No.	Capacity, mL	Graduations, mL	Tolerance, mL	No. per Pack	No. per Case
3650-0025	25	0.10	±0.06	1	4
3650-0050	50	0.10	±0.10	1	4
3650-0100	100	0.20	±0.20	1	4
713650-1025	Replacement Stopcock Assembly for 25 mL			2	2

## ► Thermo Scientific Nalgene Autoclavable Carboys with Spigot

polypropylene, white polypropylene screw closure with thermoplastic elastomer gasket, polypropylene spigot



**Nalgene™ Autoclavable Carboys have a spigot boss which is molded in one piece with the carboy for convenience and strength – great for storing and dispensing solutions and media.**

Can be autoclaved before refilling to eliminate bacterial growth when storing sterile water.

### details

- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Integral shoulder handles make lifting comfortable
- Ideal for storing and dispensing solutions and media and can be autoclaved before refilling to eliminate bacterial growth
- Molded-in spigot boss provides strength and leak resistance
- Autoclavable/Graduated/Leakproof†

**Ordering Information:** Neck accepts No. 13.5 rubber stopper. Includes spigot closure. Follow product insert instructions for autoclaving to ensure proper function.

**Includes:** Polypropylene screw closure, spigot, spigot closure and tubing adapter.

*Notes: Containers can be used for long-term storage, but direct UV exposure should be avoided. Remove and disassemble spigot before autoclaving. May be assembled with spigot closure for autoclaving. Completely disengage closure threads before autoclaving avoided.*

Nalgene Autoclavable Carboys with Spigot

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2319-0020	10 (2-1/2)	83B	64	250	389	1	6
2319-0050	20 (5-1/2)	83B	64	286	528	1	4
2319-0130	50 (13)	83B	64	379	678	1	1

### ► Select the perfect container for your application.

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or download our free apps from iTunes or the Android market  
– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Round Carboys with Spigots

low-density polyethylene; polypropylene spigot and screw closure



**Nalgene™ Round Carboys have a spigot boss which is molded in one piece with the carboy for convenience, strength and leak resistance.**

Suitable for collecting and dispensing distilled water, acids and reagents.

### details

- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Integral shoulder handles make lifting comfortable for four largest sizes
- Molded-in spigot boss provides strength and leak resistance
- Graduated/Leakproof†

**Ordering Information:** Shoulder loop on 1 gal. (3.8 L) size, shoulder handles on all other sizes. 1 gal. size is not graduated.

**Includes:** Polypropylene screw closure, spigot, spigot closure and tubing adapter.

### Nalgene Round Carboys with Spigots

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2318-0010	4 (1)	38-430	26	154	335	1	6
2318-0020	10 (2-1/2)	83B	64	250	389	1	6
2318-0050	20 (5-1/2)	83B	64	286	528	1	4
2318-0065	25 (6-1/2)	83B	64	287	594	1	1
2318-0130	50 (13)	83B	64	379	678	1	1





## ► Thermo Scientific Nalgene Clearboys

polycarbonate, polypropylene closure with thermoplastic elastomer gasket, polypropylene spigot



**Nalgene™ Clearboys are durable, lighter and safer than glass.**

Useful for large-volume media and culture preparation, especially where visual inspection of contents for quality is important. Autoclavable for sterile applications and ideal for refrigerated or frozen storage of aqueous solutions such as sterile water, aqueous reagents and media.

### details

- With white polypropylene screw closure; TPE gasket
- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Polycarbonate is glass-clear for easy visual inspection and volume measurements
- Clearboys are suitable for mixing, storing and freezing aqueous-based reagents and biologicals
- Designed with 83 mm neck to accept TopWorks and other Nalgene accessories for versatility
- Graduated "To Contain"
- Autoclavable/Transparent/Graduated/Leakproof†

**Includes:** Polypropylene closure and TPE gasket, spigot, spigot closure and tubing adapter.

*Notes: Remove and disassemble spigot before autoclaving. May be assembled with spigot closure for autoclaving. Completely disengage closure threads before autoclaving. Repeated autoclaving will shorten the life of polycarbonate carboys.*

### Nalgene Round Transparent Clearboys

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2317-0020	10 (2-1/2)	83B	66	253	394	1	4
2317-0050	20 (5-1/2)	83B	66	290	536	1	4



## ► Thermo Scientific Nalgene Low-Profile Lowboys

high-density polyethylene



**Nalgene™ Low-Profile Lowboys™ are perfect for dispensing most liquids, including reagents, distilled water and titrants.**

The low-profile design fits into tight spaces on shelves and in refrigerators and can stack three high. Exhibits excellent chemical resistance.

### details

- Stack up to three high to save space on benchtop or in refrigerator
- Contour handle allows easy one-handed carrying – even when full
- Excellent chemical resistance – can tolerate strong acids and bases for a wide variety of solutions
- Leakproof†

**Includes:** Spigot and spigot closure and four acid-proof, pressure-sensitive labels. Also includes a spigot tubing adapter.

**Alerts:** Not recommended for use with aggressive organic solvents

#### Nalgene Low-Profile Lowboys

Cat. No.	Capacity, L (gal.)	Closure Size, mm	L x W, mm	No. per Pack	No. per Case
2323-0008	8 (2)	63	305 x 366	1	4
2323-0015	15 (4)	63	371 x 371	1	4

## ► Thermo Scientific Nalgene Autoclavable Lowboys with Spigot

polypropylene copolymer; polypropylene spigot and screw closure



**Nalgene™ Low-Profile Lowboys are perfect for dispensing most liquids, including reagents, distilled water and titrants.**

The low-profile design fits into tight spaces on shelves and in refrigerators and can stack three high. Exhibits excellent chemical resistance.

### details

- Stack up to three high to save space on benchtop or in refrigerator
- Contour handle allows easy one-handed carrying – even when full
- Excellent chemical resistance – can tolerate strong acids and bases for a wide variety of solutions
- Follow autoclave instructions provided with the product to ensure proper function.
- Autoclavable/Leakproof†

**Includes:** Polypropylene spigot, spigot closure and 63 mm screw closure.

*Notes: Remove and disassemble spigot before autoclaving. May be assembled with spigot closure for autoclaving. Completely disengage closure threads before autoclaving.*

#### Nalgene Autoclavable Lowboys with Spigot

Cat. No.	Capacity, L (gal.)	Closure Size, mm	L x W, mm	No. per Pack	No. per Case	No. per Case
2324-0008	8 (2)	63	305 x 366	1	4	4
2324-0015	15 (4)	63	371 x 371	1	4	4



► **Thermo Scientific Nalgene Autoclavable Rectangular Carboys with Spigot**  
polypropylene copolymer, polypropylene spigot and screw closure



**Nalgene™ Rectangular Carboys have a space-saving design for storing and dispensing media, solutions and sterile water.**

These carboys feature a wide mouth opening for filling and cleaning and a spigot for easy dispensing. Sturdy stainless steel handle.

**details**

- Wide-mouth opening permits easy filling, transferring and cleaning of carboys
- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Stainless steel handle for ease in transporting containers
- Molded-in spigot boss provides strength and leak resistance
- 20 L size has molded-in hand grip for easy handling
- Durable design made to withstand rigorous lab and field use
- Spigot comes with tubing adapter for added versatility
- Autoclavable/Graduated

**Includes:** Polypropylene spigot and screw closure, spigot closure and tubing adapter.

*Notes: Remove and disassemble spigot before autoclaving. May be assembled with spigot closure for autoclaving. Completely disengage closure threads before autoclaving.*

**Nalgene Autoclavable Rectangular Carboys with Spigot**

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2321-0020	9 (2)	100	86	361	1	6
2321-0050	20 (5-1/2)	100	86	399	1	4



## ► Thermo Scientific Nalgene Rectangular Clearboy with Spigot

polycarbonate; polypropylene spigot and screw closure



**Nalgene™ Rectangular Clearboys** have a space-saving design for storing and dispensing media, solutions and sterile water. These carboys feature a wide mouth opening for filling and cleaning. Features a sturdy stainless steel handle and extreme impact resistance. Ideal for cold room use.

### details

- Wide-mouth opening permits easy filling, transferring and cleaning of carboys
- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Stainless steel handle for ease in transporting containers
- Molded-in spigot boss provides strength and leak resistance
- Clear wall makes this carboy ideal when visual inspection of contents is necessary
- 20 L size has molded-in hand grip for easy handling
- Durable design made to withstand rigorous lab and field use
- Spigot comes with tubing adapter for versatility
- Follow autoclave instructions provided with the product for proper function
- Autoclavable/Transparent/Graduated/Leakproof†

**Includes:** Polypropylene spigot and screw closure; spigot, spigot closure and tubing adapter.

*Notes: Remove and disassemble spigot before autoclaving. May be assembled with spigot closure for autoclaving. Completely disengage closure threads before autoclaving.*

### Nalgene Autoclavable Clear Rectangular Carboys with Spigot

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2322-0020	9 (2)	100	86	361	1	6
2322-0050	20 (5-1/2)	100	86	399	1	4



► **Thermo Scientific Nalgene Rectangular Carboy with Spigot**  
high-density polyethylene, polypropylene spigot and screw closure



**Nalgene™ Rectangular Carboys have a space-saving design for storing and dispensing media, solutions and deionized water.**

These carboys feature a wide mouth opening for filling and cleaning and a sturdy stainless steel handle. Tough, rigid and excellent chemical resistance make this carboy a good choice for dispensing stock solutions.

#### details

- Wide-mouth opening permits easy filling, transferring and cleaning of carboys
- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Stainless steel handle for ease in transporting containers
- Molded-in spigot boss provides strength and leak resistance
- Spigot comes with a convenient tubing adapter providing versatility
- 20 L size has molded-in hand grip for easy handling
- Durable design made to withstand rigorous lab and field use
- Rectangular shape saves valuable space on your benchtop
- Graduated

**Includes:** Polypropylene screw closure and spigot, spigot closure and tubing adapter.

#### Nalgene Rectangular Carboy with Spigot

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2320-0020	9 (2)	100	86	361	1	6
2320-0050	20 (5-1/2)	100	86	399	1	4



## ► Thermo Scientific Nalgene Fluorinated Rectangular Carboy with Spigot

fluorinated high-density polyethylene, Tefzel™ ETFE spigot, fluorinated white polypropylene screw closure



**Nalgene™ Fluorinated Rectangular Carboys have a space-saving design for storing and dispensing a variety of solvents.**

These carboys feature a wide mouth opening for filling and cleaning and a sturdy stainless steel handle. Fluorinated surface (inside and out) improves barrier properties and reduces solvent absorption while enhancing long-term container performance and prevents loss due to permeation.

### details

- With Tefzel™ ETFE spigot; fluorinated white polypropylene screw closure
- Wide-mouth opening permits easy filling, transferring and cleaning of carboys
- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Stainless steel handle for ease in transporting containers
- Molded-in spigot boss provides strength and leak resistance
- Rectangular shape saves valuable space on your benchtop
- 20 L size has molded-in hand grip for easy handling
- Durable design made to withstand rigorous lab and field use
- Graduated

**Includes:** ETFE spigot and fluorinated white polypropylene screw closure, ETFE spigot, spigot closure and tubing adapter.

### Nalgene Fluorinated Rectangular Carboy with Spigot

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	L x W, mm	Height with Closure, mm	No. per Case
DS2327-0020	9 (2)	100	86	216 x 147	358	1
DS2327-0050	20 (5-1/2)	100	86	318 x 219	381	1



## ► Thermo Scientific Nalgene Carboys with Tubulation

low-density polyethylene, polypropylene screw closure



**Nalgene™ Carboys with Tubulation are molded in one piece with serrated tubulation for strength, leak resistance and a longer life.**

Convenient wide-shoulder handles for easy carrying.

### details

- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Carboy and tubulation molded in one piece for strength, leak resistance and a longer life
- Low outlet provides for more complete drainage
- Molded-in handle for ease in transporting containers
- Graduated/Leakproof†

**Includes:** Polypropylene screw closure.

*Notes: Hose clamp should be used when attaching tubing to ensure a tight fit and avoid leaking. Containers can be used for long-term storage, but direct UV exposure should be avoided.*

Nalgene Carboys with Tubulation

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2302-0020	10 (2-1/2)	83B	64	245	389	1	6
2302-0050	20 (5-1/2)	83B	64	281	528	1	4

## ► Thermo Scientific Nalgene Autoclavable Carboys with Bottom Tubulation

polypropylene; polypropylene screw closure; TPE (thermoplastic elastomer) gasket



**Nalgene™ Autoclavable Carboys with Bottom Tubulation are used with distilled water and culture media.**

These carboys are molded in one piece with serrated tubulation for strength, leak resistance and a longer life. Tubulation accepts 1/2 in. (13 mm) I.D. tubing. Low outlet ensures more complete drainage.

### details

- Bottom tubulation molded in one piece with bottle ensures strength and leak resistance
- Location of outlet low on the carboy ensures more complete drainage
- Molded-in handles for ease in transporting containers
- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Follow autoclave instructions provided with the product for proper function
- Autoclavable/Graduated/Leakproof†

**Ordering Information:** Both sizes accept 1/2 in. I.D. (1.3 cm) tubing (not included).

**Includes:** White polypropylene screw closure with TPE gasket.

*Notes: A hose clamp should be used when attaching tubing to ensure tight fit. Completely disengage threads or remove cap before autoclaving*

Nalgene Autoclavable Carboys with Bottom Tubulation

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2301-0020	10 (2-1/2)	83B	64	245	389	1	6
2301-0050	20 (5-1/2)	83B	64	281	528	1	4



## ► Thermo Scientific Nalgene Rectangular Carboys with Tubulation

high-density polyethylene; polypropylene screw closure



**Nalgene™ Rectangular Carboys are molded in one piece with serrated tubulation for strength, leak resistance and a longer life.**

Tubulation accepts 1/2 in. (13 mm) ID tubing. Efficient use of laboratory space with rectangular shape.

### details

- Wide-mouth opening permits easy filling, transferring and cleaning of carboys
- Molded-in graduations in 1 gal. and 5 L increments for ease in dispensing
- Carboy and tubulation molded in one piece for strength, leak resistance and a longer life
- Low outlet provides for more complete drainage
- Stainless steel handle attached and built-in hand grip for ease in handling
- Rectangular shape saves valuable space on your benchtop
- Graduated

**Includes:** Polypropylene screw closure.

*Notes: Hose clamp should be used when attaching tubing to ensure a tight fit and avoid leaking. Containers can be used for long-term storage, but direct UV exposure should be avoided.*

### Nalgene Rectangular Carboys with Tubulation

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	L x W, mm	Height with Closure, mm	No. per Pack	No. per Case
2303-0020	9 (2)	100	86	220 x 153	361	1	6
2303-0050	20 (5-1/2)	100	86	229 x 320	399	1	4

### ► Select the perfect container for your application.

Go to: [www.thermoscientific.com/nalgenecontainers](http://www.thermoscientific.com/nalgenecontainers)  
or download our free apps from iTunes or the Android market  
– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Safety Dispensing Jugs

low-density polyethylene; white polypropylene screw closure



**Nalgene™ Dispensing Jug has a permanently attached pour spout and a polypropylene screw closure.**

Lighter in weight than glass, this jug protects against leakage, breaking and contamination. Wide shoulder handle and molded bottom grip for additional support when pouring.

### details

- Integral shoulder handle and molded bottom grip make carrying and pouring comfortable and easy
- Molded-in pour spout reduces splash, back off closure to vent
- Attached closure won't get lost
- Leakproof†

**Includes:** Polypropylene screw closure.

### Nalgene Safety Dispensing Jugs

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2340-0020	10 (2-1/2)	83B	64	250	389	1	4
2340-0050	20 (5-1/2)	83B	64	286	528	1	4



## ► Thermo Scientific Nalgene Jugs

polypropylene copolymer, polypropylene screw closure



**Nalgene™ PPCO Jugs have a large carrying handle which allows the use of rubber gloves for safe handling of corrosive liquids.**

Excellent chemical resistance. The pour spout is offset for easy, accurate pouring.

### details

- Lightweight for easy handling and carrying – one-third the weight of glass
- Autoclavable/Leakproof†

**Includes:** Polypropylene screw closure; 8 L size has a white PP closure with a TPE gasket.

*Notes: Completely disengage threads or remove cap before autoclaving polypropylene jugs. For the best results, autoclave using a properly vented closure.*

Nalgene Jugs

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2221-0010	4 (1)	38-430	25	152	304	1	6
2221-0020	8 (2)	53B	39	195	385	1	6

## ► Thermo Scientific Nalgene Jugs

low-density polyethylene, polypropylene screw closure



**Nalgene™ LDPE Jugs have a large carrying handle which allows the use of rubber gloves for safe handling of corrosive liquids.**

Excellent chemical resistance. The pour spout is offset for easy, accurate pouring.

### details

- Lightweight for easy handling and carrying – one-third the weight of glass
- Leakproof†

**Includes:** Polypropylene screw closure.

Nalgene Jugs

Cat. No.	Capacity, L (gal.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2220-0010	4 (1)	38-430	25	152	304	1	6
2220-0020	8 (2)	53B	39	195	385	1	6



## ► Thermo Scientific Nalgene Quick-Action Spigots

polypropylene with high-density polyethylene tubing adapter



**Nalgene™ Quick-Action Spigots are the standard for Nalgene carboys.**

Includes HDPE tubing adapter which accepts tubing with 1/4 or 5/16 in. I.D.

### details

- Takes 5/8 in. (1.6 cm) I.D. tubing without a tubing adapter
- Supplied with adapter for 1/4 or 5/16 in. (0.6 or 0.8 cm) tubing
- Autoclavable (unassembled)

*Notes: Spigot should be disassembled before autoclaving. Tubing adapter is not autoclavable.*

### Nalgene Quick-Action Spigots

Cat. No.	Material	No. per Pack	No. per Case	No. per Case
6422-0010	Polypropylene	1	12	12

## ► Thermo Scientific Nalgene Quick-Action Spigots

Tefzel™ ETFE (ethylene-tetrafluoroethylene), polypropylene



**Nalgene™ ETFE Quick-Action Spigots are chemically resistant to selected solvents and other chemicals.**

Body and plug are made of Tefzel™ ETFE. Accepts tubing with 5/8 in. I.D.

### details

- Replacement spigot for DS2327-series fluorinated carboys
- Tubing adapter not included
- Autoclavable (unassembled)

*Notes: Disassemble spigot before autoclaving.*

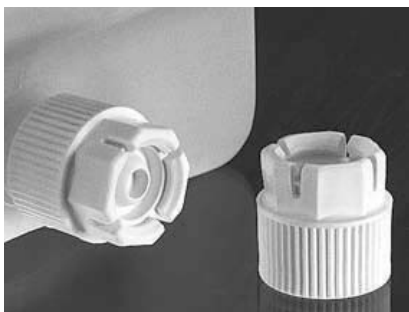
### Nalgene Quick-Action Spigots

Cat. No.	Material	No. per Pack	No. per Case
6432-0010	ETFE	1	2



## ► Thermo Scientific Nalgene Spigot Closure

white polypropylene lock nut, thermoplastic elastomer plug



**Nalgene™ Spigot Closure fits all Nalgene carboys with spigot and selected Nalgene tanks with spigot.**

Use to replace the spigot during autoclaving. Also useful when handling could damage or accidentally turn on a spigot or when a spigot-less carboy is required. Included with all Nalgene carboys with spigot.

Closure keeps solutions safe by providing a leakproof seal when handling could damage or accidentally turn spigot on

Designed to fit Nalgene carboys, Clearboys, Lowboys and tanks that have a thread size of 1-1/8 in., 12 male screw head

### details

- Autoclavable/Leakproof†

#### Nalgene Spigot Closure

Cat. No.	Description	No. per Pack	No. per Case
6423-0010	Spigot Closure for Nalgene Bottles, Jars, Carboys	4	24

## ► Thermo Scientific Nalgene Carboy Replacement Screw Closures and Gaskets



**Nalgene™ Replacement Screw Closures for Nalgene Carboys fit securely for guaranteed leakproof service. Gaskets for 53B and 83B closures are also available.**

### details

- Made to fit Nalgene Carboys

#### Nalgene Carboy Replacement Screw Closures and Gaskets

Cat. No.	Closure Size, mm	Description	No. per Pack	No. per Case
712150-1000	100	Screw White Closure PP 100 mm	12	12
712155-1200	120	Large Jar Closure White PP 120 mm	12	12
712160-0053	53B	Sealing Gasket TPE For 53B closure	12	12
712160-0530	53B	Screw Closure White PP 53B	12	12
712160-0830	83B	Screw Closure White PP 83B	2	2
712162-1830	—	Sealing Gasket TPE for Sealing Closure 712160-0830	5	5



## ► Thermo Scientific Nalgene Magnetic Carboy Stirrer

polyvinylidene fluoride, stainless steel-reinforced shaft, Teflon® TFE stir bar, TFE, impeller, polypropylene screw closure



**Nalgene™ Magnetic Carboy Stirrer is used with Nalgene 10 L and 20 L carboys for low-speed mixing of high volumes of media and buffer solution.**

Adjusts easily to fit either a 10 L or 20 L Nalgene carboy with an 83B size closure. Supplied with a closure and two impellers. Eliminates the need to retrieve magnets from your solution.

### details

- Provides low-speed mixing of high volumes of media and buffer solution
- Fits 10 L or 20 L Nalgene carboys with 83B closure
- For use with a magnetic stir plate (not included)
- Autoclavable

*Notes: Includes closure and two impellers.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Magnetic Carboy Stirrer

Specifications	
Closure size, mm	83B
Shaft O.D.	13 mm
Shaft Length	588 mm
Stir Bar Diameter	13 mm
Stir Bar Length	75 mm

Cat. No.	Length, mm	No. per Case
DS2227-0020	588	1



## ► Thermo Scientific Nalgene Conical-Bottom Centrifuge Tubes

### polypropylene copolymer



**Nalgene™ PPCO Conical-Bottom Centrifuge Tubes with molded-in graduations have excellent chemical resistance.**

Designed for low-speed centrifugation up to 6000 xg in refrigerated and non-refrigerated centrifuges

#### details

- Translucent PPCO is compatible with a wide range of lab reagents
- Conical bottoms concentrate pellet in a small area for easy isolation and retrieval
- Molded-in graduations last the life of the tube
- Last longer than polycarbonate tubes under conditions of repeated autoclaving
- Autoclavable/Graduated

**Ordering Information:** Supplied without closure; friction fit closures available. For 15 mL use DS3111-00017; for 50 mL use DS8111-0029.

*Notes: Conical centrifuge tubes must be filled at least 80% for proper performance.*

#### Nalgene Conical-Bottom Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	No. per Pack	No. per Case	Cap, sold separately
3103-0015	15	16.8 x 118.6	10	100	DS3111-0017
3103-0050	50	28.7 x 133.1	10	100	DS3111-0029

## ► Thermo Scientific Nalgene Conical-Bottom Centrifuge Tubes

### polycarbonate



**Nalgene™ PC open-top Conical-Bottom Tubes have outstanding mechanical strength and clarity, making them excellent for whole-cell separations.**

Versatile polycarbonate tubes can be used up to 6000 xg in both refrigerated and nonrefrigerated centrifuges.

#### details

- Conical bottoms concentrate pellet in a small area for easy isolation and retrieval
- Excellent clarity for viewing tube contents
- Molded-in graduations last the life of the tube
- Autoclavable/Graduated/Transparent

**Ordering Information:** Supplied without closure; friction fit closures available. For 15 mL use DS3111-0017; for 50 mL use DS3111-0029.

*Notes: Conical centrifuge tubes must be filled at least 80% for proper performance. Autoclaving repeatedly shorten the life of polycarbonate tubes.*

#### Nalgene Conical-Bottom Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	No. per Pack	No. per Case	Caps, sold separately
3105-0015	15	17.0 x 120.1	10	100	DS3111-0017
3105-0050	50	28.7 x 134.1	10	100	DS3111-0029



## ► Thermo Scientific Nalgene High-Speed Round-Bottom Centrifuge Tubes polypropylene copolymer



**Nalgene™ High-Speed Round-Bottom Centrifuge Tubes feature uniform wall thickness and diameter, providing improved rotor fit and performance.**

Designed for use up to 50,000 xg to fit high speed rotors in refrigerated or nonrefrigerated centrifuges.

### details

- Molding technique produces uniform wall thickness for increased strength
- Uniform diameter (no taper) for better rotor fit and force tolerance
- 50 mL (Cat. No. 3110-9500) and 100 mL sizes lipped for easier retrieval from rotor cavities
- Excellent chemical resistance
- Economical choice – may also be used as test tubes
- Longer-lasting than polycarbonate tubes under conditions of repeated autoclaving
- Autoclavable

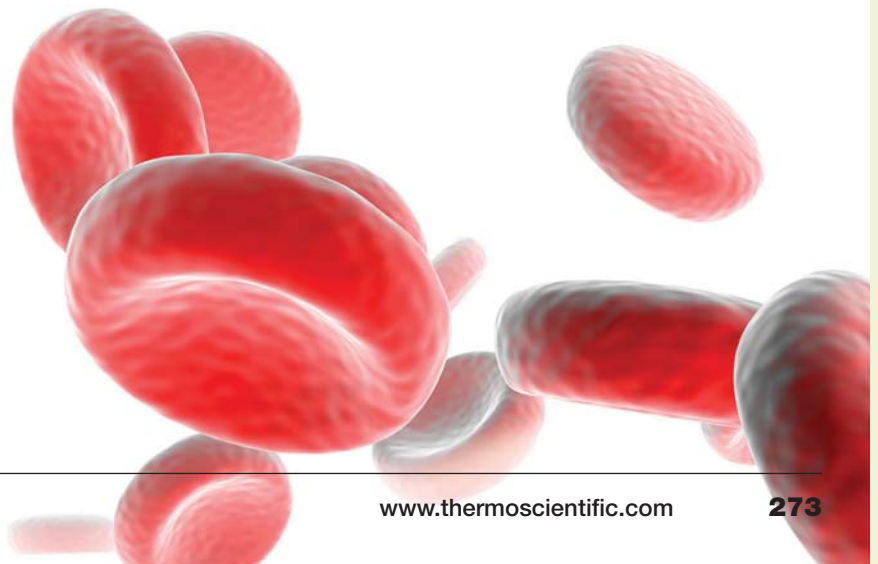
**Ordering Information:** Supplied without closure; friction-fit closures available separately (Cat. No. DS3111-series).

**Alerts:** Use with friction fit closures (Cat. No. DS3111-series) for high speed centrifugation.

*Notes: Centrifuge tubes must be filled at least 80% for proper performance.*

### Nalgene Oak Ridge High-Speed Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	No. per Pack	No. per Case	Caps, sold separately
3110-0120	12	15.8 x 102.1	10	100	DS3111-0016
3110-0150	15	15.8 x 112.8	10	100	DS3111-0016
3110-0160	16	17.8 x 98.6	10	100	DS3111-0018
3110-0380	38	25.2 x 88.1	10	100	DS3111-0025
3110-0500	50	28.5 x 102.4	10	100	DS3111-0030
3110-9500	50	28.4 x 102	10	40	DS3111-0029
3110-1000	100	31.5 x 163.1	10	100	DS3111-0032





## ► Thermo Scientific Nalgene High-Speed Round-Bottom Centrifuge Tubes polycarbonate



**Nalgene™ High-Speed Round-Bottom Centrifuge Tubes demonstrate outstanding mechanical strength and clarity.**

Designed for high-speed centrifugation up to 50,000 xg in refrigerated and non-refrigerated centrifuges

### details

- Designed with round bottoms and uniform diameter (no taper) for better fit and force tolerance to fit high-speed rotors
- Molding technique produces uniform wall thickness for increased strength
- Lip (on Cat. Nos. 3117-1000 and 3117-9500) allows easier retrieval from rotor cavities
- Economical choice – may also be used as test tubes
- Excellent clarity for viewing contents
- These high-speed polycarbonate tubes withstand temperatures from -135° to +135°C (-211° to +275°F)
- Autoclavable/Transparent

**Ordering Information:** Supplied without closure; friction-fit closures available separately (Cat. No. DS3111-series).

**Alerts:** Use with friction-fit closures (Cat. No. DS3111-series) for high-speed centrifugation.

*Notes: Centrifuge tubes must be filled at least 80% for proper performance.*

### Nalgene Oak Ridge High-Speed Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	No. per Pack	No. per Case	Cap, sold separately
3117-0120	12	15.9 x 103.1	10	100	DS3111-0016
3117-0150	15	16.0 x 114.0	10	100	DS3111-0016
3117-0160	16	17.9 x 99.8	10	100	DS3111-0018
3117-0380	38	25.3 x 88.6	10	100	DS3111-0025
3117-0500	50	28.8 x 103.1	10	100	DS3111-0030
3117-9500	50	28.5 x 102.0	10	100	DS3111-0029
3117-1000	100	31.5 x 164.3	10	40	DS3111-0032



## ► Thermo Scientific Nalgene Oak Ridge High-Speed Centrifuge Tubes

Teflon® FEP, Tefzel™ ETFE screw closure



**Nalgene™ FEP Oak Ridge High-Speed Centrifuge Tubes are excellent for high-speed centrifugation of aggressive chemicals.**

Excellent for chloroform and phenol extractions in refrigerated machines up to 50,000 xg.

### details

- Withstand temperatures from -100°C to 150°C (-148°F to 302°F) for versatility from the freezer to the autoclave and more
- Use to 50,000 xg in refrigerated centrifuges (tubes must be filled 100% to prevent collapse)
- Leakproof† Tefzel™ ETFE closures prevent material loss under ordinary use for most spins up to 10,000 xg
- Sealing caps available for 30 mL and 50 mL size to assure leakproof service especially at high speeds >10,000 xg or when spinning hazardous materials
- Autoclavable/Biohazard/Leakproof†/Teflon® FEP

**Ordering Information:** Optional sealing caps available – Cat. No. DS3131-0020 (for 30 mL tube) and DS3131-0024 (for 50 mL tube).

**Includes:** Tefzel™ ETFE screw closures (Cat. No. DS3131-series).

**Alerts:** Must be filled to 100% of total capacity for centrifugation.

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Oak Ridge High-Speed Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3114-0010	10	16.0 x 79.0	13	2	10
3114-0030	30	25.7 x 93.0	20	2	10
3114-0050*	50	28.8 x 106.7	24	2	10

\*Designed to fit standard rotors. Actual brim capacity of Cat. No. 3114-0050 is 42 mL.



## ► Thermo Scientific Nalgene Oak Ridge Centrifuge Tubes with Sealing Cap

polysulfone, polypropylene screw closure



**Nalgene™ Oak Ridge PSF Centrifuge Tubes feature enhanced resistance to acids and bases and excellent clarity for viewing separation interfaces and pellets.**

Designed for high-speed centrifugation up to 50,000 xg in refrigerated and non-refrigerated centrifuges.

### details

- With round bottoms to fit high speed rotors
- Transparent, with straw-colored cast, allows easy content viewing
- PP linerless screw closures included – easy to clean and provides leakproof performance under ordinary use for most spins up to 10,000 xg
- For leakproof assurance at speeds >10,000 xg, use with sealing cap or sealing cap assembly sold separately
- Autoclavable/Transparent/Leakproof†

**Includes:** Polypropylene sealing cap.

**Ordering Information:** Sealing cap assembly also available separately (Cat. No. DS3131-series).

*Notes: Tubes must be filled at least 80% for proper performance.*

### Nalgene Oak Ridge Centrifuge Tubes with Sealing Cap

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3115-0030	30	25.8 x 94.0	20	10	100
3115-0050*	50	29.0 x 107.2	24	10	100

*\*Designed to fit standard rotors. Actual brim capacity of Cat. No. 3115-0050 is 42 mL.*





## ► Thermo Scientific Nalgene Oak Ridge High-Speed Centrifuge Tubes

polycarbonate; polypropylene screw closure



**Nalgene™ Oak Ridge High-Speed Centrifuge Tubes are strong and have excellent mechanical strength.**

Transparent tubes are clear and allow easy viewing of contents. Designed for high-speed centrifugation up to 50,000 xg in refrigerated and non-refrigerated centrifuges.

### details

- Excellent mechanical strength and visual clarity
- Can be autoclaved repeatedly – but autoclaving will reduce product life
- PP linerless closures included – easy to clean and provide leakproof performance under ordinary use for most spins <10,000 xg
- For leakproof performance >10,000 xg, use a sealing cap or sealing cap assembly (sold separately)
- Autoclavable/Biohazard/Transparent/Leakproof<sup>†</sup>

**Includes:** polypropylene screw closure.

**Ordering Information:** Optional sealing-cap assemblies available for selected sizes. Use Cat. No. DS3131-0020 (for 30 mL tube) and Cat. No. DS3131-0024 (for 50 mL tube).

*Note: Centrifuge tubes must be filled at least 80% for proper performance.*

### Nalgene Oak Ridge High Speed Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3118-0010	10	16.1 x 80.5	13	10	100
3118-0028	28	25.8 x 94.0	20	10	100
3118-0030	30	25.8 x 94.0	20	10	100
3118-0050*	50	28.8 x 106.4	24	10	100
3118-0085	85	38.2 x 105.2	33	10	100

<sup>†</sup>Designed to fit standard rotors. Actual brim capacity of Cat. No. 3118-0050 is 42 mL.



## ► Thermo Scientific Nalgene Oak Ridge High-Speed Centrifuge Tubes

polypropylene copolymer, polypropylene screw closure



**Nalgene™ Oak Ridge High-Speed Centrifuge Tubes** are strong and have excellent mechanical strength. Translucent tubes are contact-clear and allow easy viewing of contents.

### details

- Greater chemical resistance than polycarbonate
- Can be autoclaved repeatedly – lasts longer than polycarbonate tubes under conditions of repeated autoclaving
- PP linerless closures – easy to clean and provides leak proof protection under normal conditions up to 10,000 xg
- For speeds >10,000 xg, sealing caps or sealing cap assemblies are recommended
- Autoclavable/Biohazard/Leakproof†

**Ordering Information:** Optional sealing cap assemblies are also available for select sizes. Use Cat. No. DS3131-0020 for 28 mL and 30 mL tubes and DS3131-0024 for 50 mL tube.

**Includes:** Polypropylene screw closures.

*Notes: Centrifuge tubes must be filled at least 80% for proper performance.*

### Nalgene Oak Ridge High Speed Centrifuge Tubes, PPCO

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3119-0010	10	16.1 x 80.5	13	10	100
3119-0028	28	25.8 x 94.0	20	10	100
3119-0030	30	25.8 x 93.5	20	10	100
3119-0050	50	28.8 x 105.9	24	10	100



## ► Thermo Scientific Nalgene Oak Ridge High-Speed Centrifuge Tubes

polysulfone, polypropylene screw closure with silicone gasket



**Nalgene™ PSF High-Speed Oak Ridge Centrifuge tubes feature enhanced resistance to acids and bases and come with sealing caps.**

Designed for high-speed centrifugation up to 50,000 xg in refrigerated and non-refrigerated centrifuges.

### details

- With round bottoms to fit high speed rotors
- Transparent, with straw-colored cast, allows easy content viewing
- PP sealing cap closure with silicone gasket for extra leak protection when spinning hazardous substances at >10,000 xg
- Autoclavable/Biohazard/Transparent/Leakproof†

**Includes:** Polypropylene sealing cap with silicone gasket.

**Ordering Information:** Sealing cap assembly available separately (Cat. No. DS3131-0024).

*Note: Conical centrifuge tubes must be filled at least 80% for proper performance.*

### Nalgene Oak Ridge Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3137-0050*	50	28.8 x 114.8	24	10	50

*\*Designed to fit standard rotors. Actual brim capacity of Cat. No. 3137-0050 is 42 mL.*



## ► Thermo Scientific Nalgene Oak Ridge High-Speed Centrifuge Tubes

polycarbonate; polypropylene screw closure; silicone gasket



**Nalgene™ Polycarbonate High-speed Oak Ridge Centrifuge Tubes are strong and have excellent mechanical strength. Transparent tubes provide clarity for easy viewing of contents.**

Designed for high-speed centrifugation up to 50,000 xg in refrigerated and non-refrigerated centrifuges

### details

- With round bottoms to fit high speed rotors
- Transparent, allowing easy content viewing
- PP sealing caps with silicone gaskets for extra leak protection when spinning >10,000 x g or spinning hazardous materials
- Autoclavable/Biohazard/Transparent/Leakproof†

**Includes:** Polypropylene sealing cap with silicone gasket.

**Ordering Information:** Sealing cap assembly available separately (Cat. No. DS3131-0020 for 30 mL tube and DS3131-0024 for 50 mL tube).

*Notes: Conical centrifuge tubes must be filled at least 80% for proper performance*

### Nalgene Oak Ridge High Speed Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3138-0010	10	16.1 x 83.8	13	10	50
3138-0016	16	18.1 x 107.2	15	10	50
3138-0030	30	25.8 x 102.6	20	10	50
3138-0050*	50	28.8 x 114.8	24	10	50

*\*Designed to fit standard rotors. Actual brim capacity of Cat. No. 3138-0050 is 42 mL.*



## ► Thermo Scientific Nalgene Oak Ridge High-Speed Centrifuge Tubes

polypropylene copolymer, polypropylene screw closure, silicone gasket



**Nalgene™ Oak Ridge High-speed Centrifuge Tubes are strong and have excellent mechanical strength.**

Translucent tubes are contact-clear and allow easy viewing of contents. Designed for high-speed centrifugation up to 50,000 xg in refrigerated and non-refrigerated centrifuges

### details

- Greater chemical resistance than polycarbonate
- Can be autoclaved repeatedly – last longer than polycarbonate tubes under conditions of repeated autoclaving
- PP sealing caps with silicone gaskets included for extra leak protection when spinning >10,000xg or spinning hazardous materials
- Autoclavable/Biohazard/Leakproof†

**Includes:** polypropylene sealing cap with silicone gasket.

**Ordering Information:** Optional sealing-cap assemblies available for selected sizes. Use Cat. No. DS3131-0020 (for 30 mL tube) and DS3131-0024 (for 50 mL Tube).

*Note: Centrifuge tubes must be filled at least 80% for proper performance.*

### Nalgene Oak Ridge High-Speed Centrifuge Tubes with Sealing Cap

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3139-0010	10	16.1 x 82.8	13	10	50
3139-0016	16	18.1 x 106.4	15	10	50
3139-0030	30	25.8 x 102.1	20	10	50
3139-0050*	50	28.8 x 113.5	24	10	50

\*Actual brim capacity of Cat. No. 3139-0050 is 42 mL.



## ► Thermo Scientific Nalgene Conical Oak Ridge High-Speed 35 mL Graduated Centrifuge Tubes

polycarbonate, polypropylene screw closure



**Nalgene™ Conical Oak Ridge tubes combine the better separation and pelleting of a conical tube with the superior sealing capability of an Oak Ridge tube.**

Tube can spin up to 50,000 xg in a refrigerated or non-refrigerated centrifuge, conical tube adapter required.

### details

- With conical bottoms for superior separation and pelleting
- Feature silk-screened graduations from 5 to 35 mL in 1 mL increments
- Polycarbonate tubes offer high strength, white graduations and are transparent
- Can withstand forces to 50,000 xg in refrigerated or non-refrigerated centrifuges – requires adapter, Cat. No. DS3147-0050, sold separately
- Supplied with polypropylene linerless closures for leakproof performance up to 10,000 xg
- Autoclavable/Biohazard/Transparent/Graduated/Leakproof†



**Includes:** Linerless, polypropylene screw closure.

**Ordering Information:** To assure leakproof service, especially at speeds greater than 10,000 xg or when spinning hazardous materials, use Nalgene sealing caps Cat. No. DS3132-0024 or sealing cap assemblies Cat. No. DS3131-0024.

**Requires:** white polycarbonate tube adapter (see Cat. No. DS3147-0050 below) to centrifuge.

*Note: Conical centrifuge tubes must be filled at least 80% for proper performance. Repeated autoclaving will shorten the life of PC tubes.*

### Nalgene Conical Oak Ridge High-Speed 35 mL Graduated Centrifuge Tubes

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3146-0050	35	28.3 x 104.4	24	10	100
DS3147-0050	35	Oakridge Conical Tube Adapter	—	—	6





## ► Thermo Scientific Nalgene Conical Oak Ridge Centrifuge Tube

graduated, polypropylene copolymer, polypropylene screw closure



**Nalgene™ Conical Oak Ridge tubes combine the better separation and pelleting of a conical tube with the superior sealing capability of an Oak Ridge tube.**

Tube can spin up to 50,000 xg in a refrigerated or non-refrigerated centrifuge, conical tube adapter required. Can be used with sealing caps, sold separately, for added leakproof performance >10,000 xg.

### details

- With conical bottoms for superior separation and pelleting
- Feature silk-screened graduations from 5 to 35 mL in 1 mL increments
- Polypropylene copolymer tubes are translucent and offer better chemical resistance than polycarbonate; repeatedly autoclavable
- Can withstand forces to 50,000 xg in refrigerated or non-refrigerated centrifuges – requires adapter, Cat. No. DS3147-0050, sold separately
- Supplied with polypropylene linerless closures for leak-proof performance up to 10,000 xg
- Autoclavable/Biohazard/Graduated/Leakproof†



**Includes:** Linerless, polypropylene screw closure.

**Ordering Information:** To assure leakproof service, especially at speeds greater than 10,000 xg or when spinning hazardous materials, use Nalgene sealing cap Cat. No. DS3132-0024 or sealing cap assembly Cat. No. DS3131-0024.

**Requires:** White polycarbonate tube adapter (see Cat. No. DS3147-0050 in the table below).

### Nalgene Conical Oak Ridge Centrifuge Tube

Cat. No.	Capacity, mL	O.D. x H, mm	Closure Size, mm	No. per Pack	No. per Case
3148-0050	35	28.3 x 103.8	24	10	100
DS3147-0050	35	Oakridge Conical Tube Adapter	–	–	6



## ► Thermo Scientific Nalgene Friction-Fit Closures for Plastic Centrifuge Tubes

polypropylene



**Nalgene™ Friction-Fit closures are designed to fit Nalgene open-top round bottom and conical centrifuge tubes and feature a pull tab for easy removal from the centrifuge.**

May not be liquid-tight during high-speed centrifugation.

### details

- Designed to be compatible with Nalgene open-top round bottom and conical centrifuge tubes
- Cat. No. DS3111-0030 fits non-lipped 50 mL centrifuge tubes only
- Autoclavable



### Nalgene Friction-Fit Closures for Open Top Centrifuge Tubes

Cat. No.	Closure Size, mm	No. per Case
DS3111-0016	16	20
DS3111-0017	17	20
DS3111-0018	18	20
DS3111-0025	25	20
DS3111-0029	29	20
DS3111-0030	30	20
DS3111-0032	32	20

## ► Thermo Scientific Nalgene Sealing Cap Assemblies

polypropylene screw closure, Tefzel™ ETFE plug, Viton™ fluoroelastomer o-ring



**Nalgene™ Sealing Cap Assembly permits tube use at their highest rated speed level (10,000 xg or greater) without leakage, even when full.**

Recommended when spinning hazardous materials compatible with centrifuge tube material.

### details

- Top fits securely for use at maximum speeds without leakage
- Autoclavable/Biohazard/Leakproof†

*Notes: Completely disengage threads before autoclaving.*

### Nalgene Sealing Cap Assemblies

Cat. No.	Closure Size, mm	No. per Case
DS3131-0020	20	2
DS3131-0024	24	2



## ► Thermo Scientific Nalgene Oak Ridge High-Speed Centrifuge Tube Sealing Caps

polypropylene screw closure, silicone gasket



**Nalgene™ Sealing Caps for Oak Ridge Centrifuge Tubes ensure leakproof service at their maximum speeds >10,000 xg, even when full.**

Also recommended when spinning hazardous materials compatible with centrifuge tube material.

### details

- White polypropylene with red silicone gaskets for leakproof high speed spin performance
- Designed to fit Oak Ridge centrifuge tubes with 20 or 24 threaded closure
- Autoclavable/Biohazard/Leakproof†

*Notes: Before autoclaving, set closure on top of the container without engaging the threads.*



### Nalgene Sealing Caps for Oak Ridge Tubes

Cat. No.	Closure Size, mm	No. per Case
DS3132-0020	20	2
DS3132-0024	24	2

## ► Thermo Scientific Nalgene Oak Ridge Conical Centrifuge Tube Adapter

white polycarbonate



**Nalgene™ Oak Ridge Conical Tube Adapter must be used with Nalgene 35 mL conical Oak Ridge Tubes (Cat. Nos. 3146, 3148).**

### details

- Easily removed from rotors after use
- Autoclavable

### Nalgene Oak Ridge Conical Tube Adapter

Cat. No.	Use with 35 mL Oak Ridge Tubes	No. per Case
DS3147-0050	Cat. Nos. 3146-0050 and 3148-0050	6



## ► Centrifuge Chemical Resistance Table

Chemical, Concentration	Centrifugeware												
	Tubes							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	Tefzel® ETFE	PE	PPE
1-(4-Chlorophenyl)ethanone, pure	S	S	M	S	M	M	U	U	U	M	S	S	—
1,3-Butadiene, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
1,4-Dioxane, pure	S	M	U	M	M	U	U	U	U	M	M	M	U
1:3 Mixture Of Nitric And Hydrochloric Acids, pure	S	U	U	U	U	U	U	U	M	U	S2	U	U
1-Pentanol, pure	S	S	M	M	M	M	S2	U	S	M	S	M	M
1-Phenylethanone, pure	S	M	U	M	M	U	U	U	U	M	S	M	U
1-Undecanol, pure	S	S2	M	S	M	M	M	—	S	M	S2	S	—
2,2,4-Trimethylpentane, pure	S	U	U	U	U	M	U	U	—	U	S2	U	—
2,2'-Oxybispropane, pure	S	U	U	U	U	U	U	U	U	U	S2	U	—
2,4,6-Trinitrophenol, pure	S	M	U	U	M	U	U	U	S	M	M	U	S2
2-Hydroxy-1,2,3-Propanetricarboxylic Acid Tributyl Ester, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U
2-Hydroxybenzaldehyde, pure	S	S2	M	S	M	M	U	U	M	M	U	S	—
2-Isopropoxypropane, pure	S	U	U	U	U	U	U	U	U	U	S2	U	—
2-Methoxyethanol, pure	S	S	U	S	M	U	U	U	U	M	S2	S	—
2-Methoxyethyl Oleate, pure	S	S2	U	S	M	U	U	U	—	M	S	S	—
2-Propanol, pure	S	S	U	S	S	M	S2	S2	S	S	S	S	S2
2-Propanone, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
2-Propenenitrile, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U
3-Phenyl-2-propenal, pure	S	U	M	U	U	M	U	U	U	U	S2	U	—
4'-Chloroacetophenone, pure	S	S	M	S	M	M	U	U	U	M	S	S	—
Acetaldehyde, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
Acetic Acid Benzyl Ester, pure	S	S2	U	M	S	U	U	U	S	S	S2	M	—
Acetic Acid Phenylmethyl Ester, pure	S	S2	U	M	S	U	U	U	S	S	S2	M	—
Acetic Anhydride, pure	S	M	U	U	M	U	U	U	U	M	S	U	U
Acetone, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U
Acetonitrile, pure	S	U	U	S	M	U	U	U	U	M	S2	S	U
Acetophenone, pure	S	M	U	M	M	U	U	U	U	M	S	M	U
Acrylonitrile, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U
Adipic Acid, pure	S	S	S	S	S	S	S	—	S2	S	S	S	—
Alanine, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Allyl Alcohol, pure	S	S	M	U	S	M	U	—	S	S	S2	U	—
Aluminum Chloride, pure	S	S	S2	S	S	S	S	U	S	S	S	S	S
Aluminum Hydrate, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S
Aluminum Hydroxide, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S

### Key:

S = Satisfactory

S1 = Satisfactory, may cause discoloration

S2 = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed. Testing under operation conditions is suggested before actual run.

U = Unsatisfactory; not recommended

Chemical, Concentration	Centrifugeware												
	Tubes							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	Tefzel® ETFE	PE	PPE
Aluminum Salts, pure	S	S	M	S	S	M	S2	U	M	S	S	S	S2
Aluminum Trihydrate, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S
Amino Acids, pure	S	S	S	S	S	S	S	S2	S	S	S2	S	S
Ammonia, pure	S	S	U	S	S	M	S2	U	U	S	S	S	M
Ammonium Chloride, pure	S	S	S2	S	S	S	S	S2	S2	S	S	S	S2
Ammonium Glycolate, pure	S	S2	M	S	S	M	S	–	S2	S	S	S	–
Ammonium Oxalate, pure	S	S2	S	S	S	S	S	–	–	S	S	S	–
Ammonium Salts, pure	S	S	M	S	S	M	M	S2	M	S	S	S	S2
Amyl Alcohol, pure	S	S	M	M	M	M	S2	U	S	M	S	M	M
Amyl Chloride, pure	S	U	U	U	U	U	U	U	M	U	S	U	U
Aniline, pure	S	U	U	U	M	U	U	U	U	M	M	U	U
Aqua Regia, pure	S	U	U	U	U	U	U	U	M	U	S2	U	U
Arsenic Acid, pure	S	M	S	S	S	S	S	S2	S	S	S	S	M
Benzaldehyde, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
Benzenamine, pure	S	U	U	U	M	U	U	U	U	M	M	U	U
Benzene, pure	S	U	U	U	U	U	U	U	S	U	S2	U	U
Benzol, pure	S	U	U	U	U	U	U	U	S	U	S2	U	U
Benzyl Acetate, pure	S	S2	U	M	S	U	U	U	S	S	S2	M	–
Benzyl Alcohol, pure	S	U	U	U	M	U	U	U	S	M	S	U	–
Boric Acid, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Bromine, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Bromoform, pure	S	U	U	U	U	U	U	U	S	U	M	U	–
Butadiene, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Butyl Acetate, pure	S	M	U	U	U	U	U	U	U	U	S2	U	U
Butyl Chloride, pure	S	U	U	U	U	U	U	U	–	U	S	U	U
Butyl Citrate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U
Butyric Acid, pure	S	U	U	U	U	M	U	U	M	U	S	U	–
Calcium Chloride, pure	S	S	S	S	S1	S	S	S2	S	S1	S	S	S
Calcium Hypochlorite, Saturated	S	S	U	S	S	M	S2	U	S	S	S	S	M
Carbazole, pure	S	S	U	S	S	U	S	–	–	S	S	S	–
Carbon Disulfide, pure	S	U	U	U	M	U	U	U	S	M	M	U	U
Carbon Tetrachloride, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Cedarwood Oil, pure	S	U	M	U	U	M	U	U	S	U	S2	U	–
Cellosolve® Acetate, pure	S	S2	U	S	M	U	U	U	U	M	S2	S	–
Chlorobenzene, pure	S	U	U	U	U	U	U	U	S	U	M	U	U
Chloroform, pure	S	U	U	U	U	U	U	U	S	U	M	U	U

**Key:**

S = Satisfactory

S1 = Satisfactory, may cause discoloration

S2 = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed. Testing under operation conditions is suggested before actual run.

U = Unsatisfactory; not recommended



## ► Centrifuge Chemical Resistance Table, continued

Chemical, Concentration	Centrifugeware												
	Tubes							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	Tefzel® ETFE	PE	PPE
Cinnamaldehyde, pure	S	U	M	U	U	M	U	U	U	U	S2	U	–
Cinnamic Aldehyde, pure	S	U	M	U	U	M	U	U	U	U	S2	U	–
Cinnamon Oil, pure	S	M	M	U	U	M	U	U	U	U	S2	U	–
Copper Sulfate, pure	S	S	S	S	S	S	S	S2	M	S	S	S	S
Cresol, pure	S	M	U	U	U	U	U	U	U	U	S2	U	U
Cyanoethylene, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U
Cyclohexane, pure	S	M	M	M	M	M	U	U	S2	M	S2	M	U
Cyclohexanone, pure	S	U	U	M	M	U	U	U	U	M	S	M	U
Cyclopentane, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Decahydronaphthalene, pure	S	U	U	M	U	U	U	U	S	U	S	M	U
Decalin, pure	S	U	U	M	U	U	U	U	S	U	S	M	U
Diacetone Alcohol, pure	S	M	U	S	M	U	M	U	U	M	S2	S	–
Diacetone, pure	S	M	U	U	S2	U	U	U	U	S2	S2	U	U
Dibutyl Phthalate, pure	S	M	M	U	M	M	U	U	M	M	M	U	U
Diethyl Benzene, pure	S	U	U	U	U	U	U	U	S	U	S2	U	–
Diethyl Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Diethyl Ketone, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
Diethyl Malonate, pure	S	S	U	S	S	U	U	U	U	S	S	S	–
Diethylamine, pure	S	M	U	U	M	M	M	U	U	M	U	U	–
Diethylene Dioxide, pure	S	M	U	M	M	U	U	U	U	M	M	M	U
Diethylene Glycol Monoethyl Ether, pure	S	S	U	S	S	M	U	U	M	S	S	S	–
Diethylene Glycol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	–
Diisopropyl Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	–
Dimethyl Acetamide, pure	S	S	U	M	S	U	U	U	U	S	S2	M	–
Dimethyl Formamide, pure	S	S	U	S	S	U	U	U	U	S	M	S	U
Dimethyl Ketone, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
Dimethylsulfoxide, pure	S	S	U	S	S	U	U	U	U	S	S2	S	S
Dioxane, pure	S	M	U	M	M	U	U	U	U	M	M	M	U
DIPE, pure	S	U	U	U	U	U	U	U	U	U	S2	U	–
Dipropylene Glycol, pure	S	S	M	S	S	M	S	U	S	S	S	S	S2
DMSO, pure	S	S	U	S	S	U	M	U	U	S	S2	S	S
Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Ethyl Acetate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U
Ethyl Alcohol, pure	S	S	U	M	S	S2	M	U	S	S	S	M	S
Ethyl Benzene, pure	S	U	U	U	U	U	U	U	S	U	M	U	U

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Chemical, Concentration	Centrifugeware												
	Tubes							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	Tefzel® ETFE	PE	PPE
Ethyl Benzoate, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U
Ethyl Butyrate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	–
Ethyl Chloride, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Ethyl Cyanoacetate, pure	S	S	U	S	S	U	M	U	–	S	S	S	–
Ethyl Lactate, pure	S	S	U	S	S	U	U	U	U	S	S	S	–
Ethylene Chloride, pure	S	U	U	U	U	U	U	U	M	U	U	U	U
Ethylene Glycol Monomethyl Ether, pure	S	S	U	S	M	U	U	U	U	M	S2	S	–
Ethylene Glycol, pure	S	S	U	S	S	M	S	S2	S	S	S	S	S2
Ethylene Oxide, pure	S	U	U	U	M	U	U	U	U	M	S2	U	S2
EtO, pure	S	S	U	S	S	U	U	U	U	S	S	S	S2
Fatty Acids, Saturated, pure	S	S2	M	S	S	M	S2	U	S	S	S	S	S2
Fatty Acids, Unsaturated, pure	S	S2	M	S	S	M	M	U	S	S	S	S	S2
Fluorides, pure	S	S	S	S	S	S	M	U	M	S	S	S	S2
Formic Acid, pure	S	S2	U	M	S	M	U	U	M	S	S	M	S
Freon TF, pure	S	S2	M	S	M	M	U	U	M	M	S2	S	–
Fuel Oil No. 1, pure	S	M	S2	U	M	S2	U	U	S	M	S	U	U
Gasoline, pure	S	U	U	M	U	U	U	U	S	U	S	M	U
Glutaraldehyde Disinfectant, pure	S	S	M	S	S	M	M	U	M	S	S2	S	S
Glutaraldehyde, pure	S	S	M	S	S	M	M	U	U	S	S2	S	S
Glycerine, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Glycerol, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Hexane, pure	S	M	U	U	M	U	U	U	S	M	S2	U	U
Hydrated Alumina, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S
Hydrazine, pure	S	U	U	U	U	U	U	U	S	U	U	U	–
Iodine Crystals, pure	S1	U	S1	U	S1	S1	S1	U	S	S1	S2	U	U
Isobutanol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
iso-Butyl Alcohol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
Isopropanol, pure	S	S	U	S	S	M	S2	S2	S	S	S	S	S2
Isopropyl Acetate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	–
Isopropyl Alcohol, pure	S	S	U	S	S	M	S2	S2	S	S	S	S	S2
Isopropyl Benzene, pure	S	U	U	U	U	U	U	U	S	U	S2	U	–
Isopropyl Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	–
Jet Fuel, pure	S	U	M	U	U	M	M	U	S	U	S2	U	M
Kerosene, pure	S	M	S2	U	M	S2	U	U	S	M	S	U	U
Lacquer Thinner, pure	S	U	U	U	U	U	U	U	U	U	S	U	U

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## ► Centrifuge Chemical Resistance Table, continued

Chemical, Concentration	Centrifugeware												
	Tubes							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	Tefzel® ETFE	PE	PPE
L-alpha-amino Propionic Acid, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Lead Acetate, pure	S	S	S	S	S	S	S	U	M	S	S	S	S
L-Tartaric Acid, pure	S	S2	S2	M	S	S	S	S2	S	S	S	M	S2
Magnesium Chloride, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
MEK, pure	S	S2	U	U	M	U	U	U	U	M	M	U	U
Mercuric Chloride, pure	S	S	S	S	S	S	S2	M	S	S	S	S	S
Methoxyethyl Oleate, pure	S	S2	U	S	M	U	U	U	–	M	S	S	–
Methyl Acetate, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U
Methyl Alcohol, pure	S	S	M	M	S1	S2	U	S2	M	S1	S	M	S
Methyl Ethyl Ketone, pure	S	S2	U	U	M	U	U	U	U	M	M	U	U
Methyl Isobutyl Ketone, pure	S	M	U	U	S2	U	U	U	U	S2	S2	U	U
Methyl Propyl Ketone, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U
Methylene Chloride, pure	S	U	U	U	U	U	U	U	S	U	U	U	U
Methyloxirane, pure	S	U	U	U	M	U	U	U	U	M	S	U	S2
Methyl-t-Butyl Ether, pure	S	U	U	U	U	U	U	U	M	U	S2	U	–
MIBK, pure	S	M	U	U	S2	U	U	U	U	S2	S2	U	U
Mineral Spirits, pure	S	U	U	U	U	U	M	U	S	U	S2	U	–
n-Butanol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	M
n-Butyl Acetate, pure	S	M	U	M	U	U	U	U	U	U	S2	M	U
n-Butyl Alcohol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	M
n-Decane, pure	S	U	U	M	M	M	U	U	S	M	S	M	–
n-Heptane, pure	S	U	U	U	U	M	U	U	S	U	S	U	U
Nitrobenzene, pure	S	U	U	U	M	U	U	U	U	M	S2	U	U
Nitrohydrochloric Acid, pure	S	U	U	U	U	U	U	U	M	U	S2	U	U
Nitromethane, pure	S	U	U	U	U	U	U	U	U	U	M	U	U
n-Octane, pure	S	S2	M	U	U	M	U	U	S	U	S	U	U
Oil, Cedarwood, pure	S	U	U	U	U	U	U	U	S	U	S2	U	–
Oil, Cinnamon, pure	S	M	M	U	U	M	U	U	U	U	S2	U	–
Oil, Mineral, pure	S	S2	S2	U	U	S2	M	S2	S	U	S	U	S2
Oil, Orange, pure	S	M	U	U	M	M	U	U	S	M	S	U	–
Oil, Pine, pure	S	M	U	U	M	U	U	U	S	M	S2	U	–
Orange Oil, pure	S	M	U	U	M	M	U	U	S	M	S	U	–
Orthoarsenic Acid, pure	S	M	S	S	S	S	S	S2	S	S	S	S	S2
Ozone, pure	S	S2	U	M	U	S	U	S2	S2	U	S	M	U
p-Chloroacetophenone, pure	S	S	M	S	M	M	U	U	U	M	S	S	–
p-Dichlorobenzene, pure	S	U	U	U	U	U	U	U	U	U	U	U	U

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Chemical, Concentration	Centrifugeware												
	Tubes							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	Tefzel® ETFE	PE	PPE
Pentyl acetate, pure	S	M	U	S	M	U	U	U	U	M	S	S	U
Perchloric Acid, pure	U	M	U	U	M	U	U	U	S	M	M	U	M
Perchloroethylene, pure	S	U	U	U	U	U	U	U	S	U	S2	U	–
Petroleum, pure	S	M	M	U	U	S2	U	U	S	U	S	U	S2
Phenyl Methyl Ketone, pure	S	M	U	M	M	U	U	U	U	M	S	M	U
Phenylacrolein, pure	S	U	M	U	U	M	U	U	U	U	S2	U	–
Picric Acid, pure	S	M	U	U	M	U	U	U	S	M	M	U	S2
Pine Oil, pure	S	M	U	U	M	U	U	U	S	M	S2	U	–
Potassium Chloride, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Potassium Permanganate, pure	S	S1	S1	S	S1	S1	S2	S2	S2	S1	S	S	S
Propane, pure	S	S	S	S	S	S	U	S2	S	S	S	S	M
Propionic Acid, pure	S	S2	U	M	M	M	M	–	–	M	M	M	–
Propylene Glycol, pure	S	S	M	S	S	M	S	S2	S	S	S	S	S2
Pyridine, pure	S	U	U	U	U	U	U	U	U	U	U	U	U
Salicylaldehyde, pure	S	S2	M	S	M	M	U	U	M	M	U	S	–
sec-Butanol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
sec-Butyl Alcohol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
Silicone Oil, pure	S	S	S	S	S	S	S2	U	S	S	S	S	S2
Silver Acetate, pure	S	S	S2	S	S	S	S	U	S	S	S	S	S
Silver Nitrate, pure	S	S1	S	S	S1	S	S	S2	S	S1	S	S	S1
Skydrol LD4 Aviation Hydraulic Fluid, pure	S	M	U	M	M	U	U	U	S	M	S	M	–
Soda Ash, pure	S	S	M	M	S1	S	S2	S2	S	S1	S	M	S
Sodium Acetate, pure	S	S	S2	S	S	S	S	U	U	S	S	S	S
Sodium Carbonate, pure	S	S	M	M	S1	S	S2	S2	S	S1	S	M	S
Sodium Dichromate, pure	S	S	S	S	S	S	M	S2	S	S	S	S	–
Stearic Acid, pure	S	S	M	M	S2	S2	S2	U	S	S2	S	M	S2
Sulfur Dioxide, pure	S	S	M	S	S	M	U	U	S2	S	S	S	U
Sulfur Salts, pure	S	U	U	M	M	M	U	U	M	M	S2	M	M
Tartaric Acid, pure	S	S2	S2	M	S	S	S	S2	S	S	S	M	S2
TCA, pure	S	S	U	S2	S	U	U	U	U	S	M	S2	S2
tert-Butanol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	S
tert-Butyl Alcohol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	S
Tetrahydrofuran, pure	S	M	U	U	U	U	U	U	U	U	U	U	U
THF, pure	S	M	U	U	U	U	U	U	U	U	U	U	U
Thionyl Chloride, pure	S	U	U	U	U	U	U	–	M	U	S2	U	–

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## ► Centrifuge Chemical Resistance Table, continued

Chemical, Concentration	Centrifugeware												
	Tubes							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	Tefzel® ETFE	PE	PPE
Tincture of Iodine, pure	S1	U	S1	S2	S1	S1	M	U	S	S1	S	S2	S1
Toluene, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Tribromomethane, pure	S	U	U	U	U	U	U	U	S	U	M	U	–
Tributyl Citrate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U
Trichloroacetic Acid, pure	S	S	U	S2	S	U	U	U	U	S	M	S2	S2
Trichloroethane, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Trichloroethylene, pure	S	U	U	U	U	U	U	U	S	U	U	U	U
Triethylene Glycol, pure	S	–	S2	S	S	S2	S2	–	S	S	S	S	–
Tripropylene Glycol, pure	S	S	S2	S	S	S	S	S2	S	S	S	S	S2
Tris Buffer Solution, pH 11, pure	S	S	U	S	S	S	S2	S2	S	S	S	S	S2
Tris Buffer Solution, pH 7.0, pure	S	S	M	S	S	S	S2	S2	S	S	S	S	S
Trisodium Phosphate, pure	S	S	M	S	S	M	S	S2	S	S	S	S	S2
Tung Oil, pure	S	–	–	S	S2	–	U	S2	S	S2	S	S	–
Tung Oil, pure	S	–	–	S	S2	–	U	S2	S	S2	S	S	–
Undecyl Alcohol, pure	S	S2	M	S	M	M	M	–	S	M	S2	S	–
Urea, pure	S	S	U	S	S	S	S	M	S	S	S	S	S
Vinyl Cyanide, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U
White Spirits, pure	S	U	U	U	U	U	M	U	S	U	S2	U	–
Xylene, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Zinc Stearate, pure	S	S	S	S	S	S	S	–	S	S	S	S	S

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## ► Thermo Scientific Nalgene Centrifuge Tube Low & High Speed Selector Guide

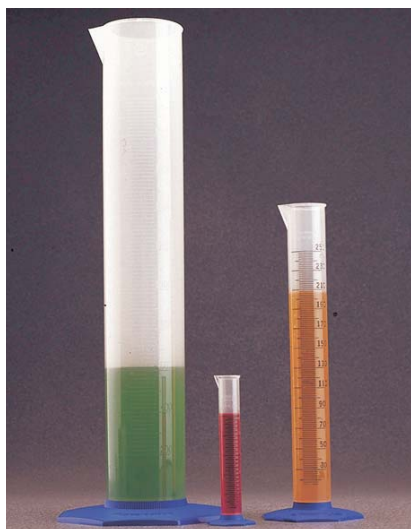
Nomical Volume	Cat. No.	Nom. Vol., mL	Description	Nom. Dim. Dia. x Ht., mm	Material	4°C	22°C	Closure Size (mm)	Closure Options Cat. No.	Rack <sup>1</sup> Cat. No.
10 mL	3114-0010	10	Oak Ridge tube, screw top	16.0 x 79.0	FEP	50,000	50,000 <sup>2</sup>	13		5970-0016
10 mL	3118-0010	10	Oak Ridge tube, screw top	16.1 x 81.5	PC	50,000	50,000	13		5970-0016
10 mL	3119-0010	10	Oak Ridge tube, screw top	16.1 x 80.5	PPCO	50,000	50,000	13		5970-0016
10 mL	3138-0010	10	Oak Ridge tube, sealing cap	16.1 x 83.8	PC	50,000	50,000	13		5970-0016
10 mL	3139-0010	10	Oak Ridge tube, sealing cap	16.1 x 82.8	PPCO	50,000	50,000	13		5970-0016
12 mL	3110-0120	12	Round tube, open top	15.8 x 102.1	PPCO	50,000	50,000	16	DS3111-0016	5970-0016
12 mL	3117-0120	12	Round tube, open top	15.9 x 103.1	PC	50,000	50,000	16	DS3111-0016	5970-0016
15 mL	3103-0015	15	Conical bottom tube, open top	16.8 x 118.6	PPCO	6,000	6,000	17	DS3111-0017	5970-0016
15 mL	3105-0015	15	Conical bottom tube, open top	17.0 x 120.1	PC	6,000	6,000	17	DS3111-0017	5970-0016
15 mL	3110-0150	15	Round tube, open top	15.8 x 112.8	PPCO	50,000	50,000	16	DS3111-0016	5970-0016
15 mL	3117-0150	15	Round tube, open top	16.0 x 114.0	PC	50,000	50,000	16	DS3111-0016	5970-0016
16 mL	3138-0016	16	Oak Ridge tube, sealing cap	18.1 x 107.2	PC	50,000	50,000	15	DS3132-0020	5970-0020
16 mL	3139-0016	16	Oak Ridge tube, sealing cap	18.1 x 106.4	PPCO	50,000	50,000	15	DS3132-0020	5970-0020
16 mL	3110-0160	16	Round tube, open top	17.8 x 98.6	PPCO	50,000	50,000	18	DS3111-0018	5970-0020
16 mL	3117-0160	16	Round tube, open top	17.9 x 99.8	PC	50,000	50,000	18	DS3111-0018	5970-0020
28 mL	3118-0028	28	Oak Ridge tube, screw top	25.8 x 94.0	PC	50,000	50,000	20	DS3132-0020	5970-0025
28 mL	3119-0028	28	Oak Ridge tube, screw top	25.8 x 94.0	PPCO	50,000	50,000	20	DS3132-0020	5970-0025
30 mL	3114-0030	30	Oak Ridge tube, screw top	25.7 x 93.0	FEP	50,000	20,000	20	DS3131-0020	5970-0025
30 mL	3115-0030	30	Oak Ridge tube, screw top	25.8 x 94.0	PSF	50,000	50,000	20	DS3132-0020	5970-0025
30 mL	3118-0030	30	Oak Ridge tube, screw top	25.8 x 94.0	PC	50,000	50,000	20	DS3132-0020	5970-0025
30 mL	3119-0030	30	Oak Ridge tube, screw top	25.8 x 93.5	PPCO	50,000	50,000	20	DS3132-0020	5970-0025
30 mL	3138-0030	30	Oak Ridge tube, sealing cap	25.8 x 102.6	PC	50,000	50,000	20	DS3132-0020	5970-0025
30 mL	3139-0030	30	Oak Ridge tube, sealing cap	25.8 x 102.1	PPCO	50,000	50,000	20	DS3132-0020	5970-0025
35 mL	3146-0050	35	Conical Oak Ridge tube, sealing cap	28.3 x 104.4	PC	50,000	50,000	24	DS3132-0024; 712150-0240	5970-0025
35 mL	3148-0050	35	Conical Oak Ridge tube, sealing cap	28.3 x 103.9	PPCO	50,000	50,000	24	DS3132-0024; 712150-0240	5970-0025
38 mL	3110-0380	38	Round tube, open top	25.2 x 88.1	PPCO	50,000	50,000	25	DS3111-0025	5970-0025
38 mL	3117-0380	38	Round tube, open top	25.3 x 88.6	PC	50,000	50,000	25	DS3111-0025	5970-0025
50 mL	3103-0050	50	Conical bottom tube, open top	28.7 x 133.1	PPCO	6,000	6,000	29	DS3111-0029	5970-0030
50 mL	3105-0050	50	Conical bottom tube, open top	28.7 x 134.1	PC	6,000	6,000	29	DS3111-0029	5970-0030
50 mL	3114-0050	50	Oak Ridge tube, screw top	28.8 x 106.7	FEP	50,000	20,000	24	DS3131-0024	5970-0030
50 mL	3115-0050	50	Oak Ridge tube, screw top	29.0 x 107.2	PSF	50,000	50,000	24	DS3131-0024	5970-0030
50 mL	3118-0050	50	Oak Ridge tube, screw top	28.8 x 106.4	PC	50,000	50,000	24	DS3131-0024	5970-0030
50 mL	3119-0050	50	Oak Ridge tube, screw top	28.8 x 105.9	PPCO	50,000	50,000	24	DS3131-0024; 712150-0240	5970-0030
50 mL	3137-0050	50	Oak Ridge tube, sealing cap	28.8 x 114.8	PSF	50,000	50,000	24	DS3132-0024	5930-0030
50 mL	3138-0050	50	Oak Ridge tube, sealing cap	28.8 x 114.8	PC	50,000	50,000	24	DS3132-0024	5930-0030
50 mL	3139-0050	50	Oak Ridge tube, sealing cap	28.8 x 113.5	PPCO	50,000	50,000	24	DS3132-0024	5930-0030
50 mL	3110-0500	50	Round tube, open top	28.5 x 102.4	PPCO	50,000	50,000	30	DS3111-0030	5930-0030
50 mL	3117-0500	50	Round tube, open top	28.8 x 103.1	PC	50,000	50,000	30	DS3111-0030	5930-0030
50 mL	3110-9500	50	Round tube with lip, open top	28.4 x 102.0	PPCO	50,000	50,000	29	DS3111-0029	5930-0030
50 mL	3117-9500	50	Round tube with lip, open top	28.5 x 106.2	PC	50,000	50,000	29	DS3111-0029	5930-0030
85 mL	3118-0085	85	Oak Ridge tube, screw cap	38.2 x 105.2	PC	50,000	50,000	33		
100 mL	3110-1000	100	Round tube with lip, open top	31.5 x 163.1	PPCO	50,000	50,000	32	DS3111-0032	5970-0030
100 mL	3117-1000	100	Round tube with lip, open top	31.5 x 164.3	PC	50,000	50,000	32	DS3111-0032	5930-0030

<sup>1</sup>White racks listed; other colors also available<sup>2</sup>For use above 20,000 RCF, always pre-test tubes



## ► Thermo Scientific Nalgene Graduated Cylinders

polypropylene copolymer, blue polypropylene base



**Nalgene™ Graduated Cylinders are guaranteed to meet accuracy requirements of ASTM Class B, E1272.**

All sizes have a generous pour spout and molded-in graduations that won't rub off for years of dependable use. No meniscus allows accurate readings every time. The large base keeps cylinders stable on the benchtop preventing tipping hazards – won't break or chip like glass labware. Suitable for food and beverage use.

### details

- Guaranteed to meet requirements of ASTM Class B, E1272 for accuracy
- No meniscus to confuse readings – eliminates guesswork
- Large blue octagonal base prevents rolling and tipping
- Generous pour spout provides ease in dispensing liquids
- Molded-in graduations are silk-screened for easy reading (10 mL-1 L sizes only)
- Excellent chemical resistance for a wide variety of solutions
- Resists temperatures up to 135°C (275°F) for a variety of uses
- Autoclavable/Graduated

**Ordering Information:** Individually packaged.

**Compliance:** Meets CFR 21, Part 177.1520 and ASTM\* E 1272 Class B requirements, as well as all requirements of ISO Standard 6706.

*Notes: Autoclaving will affect accuracy.*

### Nalgene Graduated Cylinders

Cat. No.	Capacity, mL	Graduations, mL	Limit of Error, mL	No. per Pack	No. per Case
3662-0010	10	0.2	±0.20	1	24
3662-0025	25	0.5	±0.34	1	18
3662-0050	50	1	±0.50	1	18
3662-0100	100	1	±1.00	1	12
3662-0250	250	2	±2.00	1	12
3662-0500	500	5	±4.00	1	8
3662-1000	1000	10	±6.00	1	6
3662-2000	2000	20	±12.0	1	4
3662-4000	4000	50	±29.0	1	2





## ► Thermo Scientific Nalgene Graduated Cylinders

polymethylpentene, blue polypropylene base



**Nalgene™ Graduated Cylinders are guaranteed to meet accuracy requirements of ASTM Class B, E1272.**

All sizes have a generous pour spout and molded-in graduations that won't rub off for years of dependable use. No meniscus allows accurate readings every time. The large base keeps cylinders stable on the benchtop preventing tipping hazards – won't break or chip like glass labware. Suitable for food and beverage use.

### details

- Guaranteed to meet requirements of ASTM Class B, E1272 for accuracy
- No meniscus to confuse readings – eliminates guesswork
- Large blue octagonal base prevents rolling and tipping
- Generous pour spout provides ease in dispensing liquids
- Excellent chemical resistance for a wide variety of solutions
- Resists temperatures up to 145°C (293°F) for a variety of uses
- 10, 25, 50, 100, 250, 500 and 1000 mL sizes have front-to-back raised graduations
- 2000 and 4000 mL sizes have standard graduations
- Autoclavable/Transparent/Graduated

**Ordering Information:** Individually packaged.

**Compliance:** Meets CFR 21, Part 177.1520 and ASTM\* E 1272 Class B accuracy requirements, as well as requirements of ISO Standard 6706

*Notes: Suitable for food and beverage use. Autoclaving will affect accuracy.*

### Nalgene Graduated Cylinders

Cat. No.	Capacity, mL	Graduations, mL	Limit of Error, mL	No. per Pack	No. per Case
3663-0010	10	0.2	±0.20	1	24
3663-0025	25	0.5	±0.34	1	18
3663-0050	50	1	±0.50	1	18
3663-0100	100	1	±1.00	1	12
3663-0250	250	2	±2.00	1	12
3663-0500	500	5	±4.00	1	8
3663-1000	1000	10	±6.00	1	6
3663-2000	2000	20	±12.0	1	4
3663-4000	4000	50	±29.0	1	2



## ► Thermo Scientific Nalgene Graduated Cylinder

Teflon® PFA



**Nalgene™ Graduated Cylinders have extraordinary chemical resistance to aggressive chemicals and other liquids without risk of breaking.**

This sturdy and durable cylinder tolerates a wide temperature range – from -270°C to +250°C (-454°F to 482°F) and is low in extractables. Graduations at 2 mL increments with numbered graduations every 10 mL are molded-in and won't rub off.

### details

- Extraordinary chemical resistance to aggressive chemicals and liquids – won't break or shatter
- Tolerates a wide temperature range, from -270°C to +250°C (-454°F to +482°F)
- Low in extractables – won't contaminate contents
- Graduations at 2 mL increments with numbered graduations every 10 mL are molded-in and won't rub off
- Generous pour spout provides ease in dispensing liquids
- Autoclavable/Graduated/PFA

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Graduated Cylinder

Cat. No.	Capacity, mL	Color	Tolerance	Withstand Temperature	No. per Case
3666-0100	100	Translucent	±1.50 mL	-270° to 250°C (-454° to 482°F)	1



## ► Thermo Scientific Nalgene Economy Graduated Cylinders

polypropylene copolymer



**Nalgene™ Economy PPCO Cylinders exhibit excellent chemical resistance.**

These cylinders have a generous pour spout for easily dispensing liquids and molded-in graduations that are easy-to-read and won't rub off.

### details

- Cylinders are translucent, break-resistant and non-wetting at affordable prices
- Economical – recommended for educational labs
- No meniscus to confuse readings allow for accurate measurements
- Good temperature resistance up to 135°C (275°F)
- Large, ribbed, rounded base provides reinforcement and stability to keep from tipping
- Calibrated “To Contain” and “To Deliver” at 20°C
- Graduated

### Nalgene Economy Graduated Cylinders

Cat. No.	Capacity, mL	Graduations, mL	No. per Pack	No. per Case
3664-0010	10	0.2	1	24
3664-0025	25	0.5	1	18
3664-0050	50	1	1	18
3664-0100	100	1	1	12
3664-0250	250	2	1	12
3664-0500	500	5	1	8
3664-1000	1000	10	1	6



## ► Thermo Scientific Nalgene Economy Graduated Cylinders

polymethylpentene



**Nalgene™ Economy PMP Cylinders exhibit good chemical resistance, are clear and impact-resistant.**

These cylinders have a generous pour spout for easily dispensing liquids, and easy-to-read molded in graduations that won't rub off.

### details

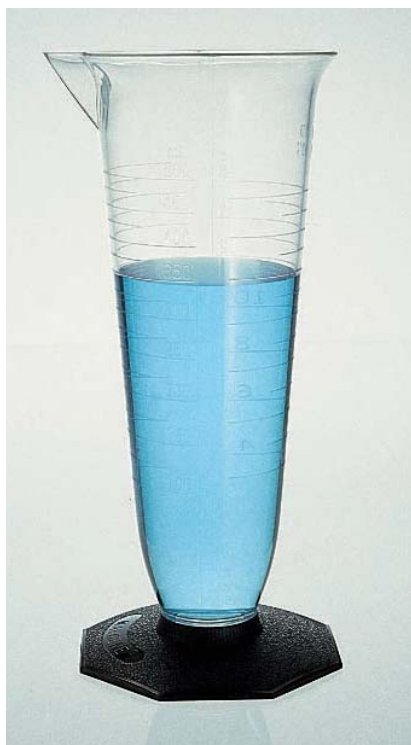
- Cylinders are transparent, break-resistant and non-wetting at affordable prices
- Economical – recommended for educational labs
- No meniscus to confuse readings allow for accurate measurements
- Large, ribbed, rounded base provides reinforcement and stability to keep from tipping
- Calibrated “To Contain” and “To Deliver” at 20°C
- Graduated/Transparent

### Nalgene Economy Graduated Cylinders

Cat. No.	Capacity, mL	Graduations, mL	No. per Pack	No. per Case
3665-0010	10	0.2	1	24
3665-0025	25	0.5	1	18
3665-0050	50	1	1	18
3665-0100	100	1	1	12
3665-0250	250	2	1	12
3665-0500	500	5	1	8
3665-1000	1000	10	1	6



## ► Thermo Scientific Nalgene Double-Scale Pharmaceutical Graduates polymethylpentene



**Nalgene™ Double-Scale Pharmaceutical Graduates are transparent and shatterproof and provide excellent chemical resistance.**

Lighter in weight than glass, they protect against chipping, cracking or breaking. Graduated in ounces and milliliters with no meniscus to confuse readings. Meets the requirement of ASTM E1094.

### details

- Graduates are transparent, shatterproof and provide excellent chemical resistance for a wide variety of solutions
- Lightweight and easy to handle
- Graduated in ounces and milliliters – no meniscus to confuse readings
- Autoclavable/Graduated/Transparent

**Compliance:** Conforms to the volume and accuracy requirements of ASTM E1094.

*Notes: Autoclaving will affect accuracy.*

### Nalgene Double-Scale Pharmaceutical Graduates

Cat. No.	Capacity, mL (oz.)	Limit of Error, mL	No. per Pack	No. per Case
3673-0004	125 (4)	±1.8	1	12
3673-0008	250 (8)	±3.4	1	12
3673-0016	500 (16)	±4.8	1	8
3673-0032	1000 (32)	±9.0	1	8



## ► Thermo Scientific Nalgene Transparent Classic Design Desiccator polycarbonate



**Nalgene™ Transparent Classic Design Desiccator is a safe and economical alternative to glass.**

Shatterproof and lightweight, this desiccator is easily transportable around the lab and ergonomic to handle. Its grease-free operation keeps your gloves clean and slip-free. Can be used under full vacuum and non-vacuum conditions.

### details

- Lightweight and virtually unbreakable, the wide base provides superior stability
- Similar in dimensions to glass desiccators but more cost-effective
- Includes ports on both cover and base for maximum convenience
- Holds a vacuum of 28 in. Hg (71.1 cm) for 24 hours
- Silicone o-ring ensures an airtight seal; no need to use grease that can contaminate your gloves and your lab
- Removable stopcock can be replaced if needed or removed and the port capped (cap included) if not used
- Transparent

**Recommended for:** Ideal for vacuum and nonvacuum applications. Follow vacuum application instructions included with the product for proper function at full vacuum.

**Ordering Information:** Takes standard 230 mm desiccator plate such as Nalgene Cat. No. 5312-0230 sold separately. Accepts 1/4 in. to 3/8 in. I.D. (0.6 to 1 cm) vacuum tubing, also sold separately.

**Alerts:** Do not autoclave or expose polycarbonate to organic solvents or their vapors. Will not shatter or implode at full vacuum when used according to instructions included with product.

### Nalgene Transparent Classic Design Desiccator

Cat. No.	H, cm (in.)	Inside Dia, cm (in.)	O.D., cm (in.)	Max Clearance Above Plate, cm (in.)	No. per Pack	No. per Case
5311-0250	33 (13)	25 (10)	28 (11)	20 (7-7/10)	1	4
<b>Accessories</b>						
715311-0010	Replacement Stopcock Assembly for 5311-0250				1	2
715311-0250	Replacement Desiccator Cover, 250 mm				2	2



## ► Thermo Scientific Nalgene 230 mm Desiccator Plate

ceramic metal



**Nalgene™ 230 mm Desiccator plate is guaranteed unbreakable.**

Desiccator plate is corrosion resistant and has greater resistance to thermal shock than porcelain.

### details

- 230 mm diameter fits the Nalgene Classic Dessicator (Cat. No. 5311-0250), as well as the 250 mm Nalgene Blue Desiccators (Cat. Nos. 5309-0250 and 5310-0250)
- With numbered quadrants for easy location of crucibles and other containers
- Has six holes in each quadrant and a 3 mm center hole to enhance airflow and drying efficiency
- Autoclavable

**Ordering Information:** Individually packaged.

### Nalgene 230 mm Desiccator Plate

Cat. No.	O.D., mm (in.)	No. per Pack	No. per Case
5312-0230	230 (9-1/16)	1	6

## ► Thermo Scientific Nalgene Autoclavable Desiccators

blue polypropylene body, clear polycarbonate cover



**Nalgene™ Desiccators have a robust polypropylene body and are highly resistant to all solid desiccants.**

These desiccators are much lighter than glass equivalents, making them easy to move around the lab. Desiccators have a transparent PC cover for easily viewing contents.

### details

- Clear polycarbonate cover has recessed rim to keep grease off benchtop when cover is set down
- No gasket required, only grease is needed
- Small desiccator (Cat. No. 5315-0150) comes with a 140 mm aluminum desiccator plate
- Autoclavable

**Alerts:** Do not use concentrated acids as desiccants.

*Notes: Repeated autoclaving will reduce the life of the product.*

### Nalgene Autoclavable Desiccators

Cat. No.	Exterior H, cm (in.)	Inside Dia., cm (in.)	O.D., cm (in)	Max Clearance Above Plate, cm (in)	No. per Pack	No. per Case
5309-0250	26 (10-1/4)	25 (9-7/8)	33 (13)	14.3 (5-5/8)	1	4
5315-0150	15 (5-15/16)	15 (5-15/16)	18 (7-1/8)	8.7 (3-7/16)	1	6



## ► Thermo Scientific Nalgene Labware Value Pack



**A convenient new lab starter pack or refresher pack for established labs.**

The Nalgene™ Labware Value Pack is a useful assortment of popular labware items used in every lab, every day; bundled in a convenient pack and available as a single catalog number. Nalgene Labware is shatterproof and it provides a safer, longer equipment life at lower replacement costs than glass. This labware value pack makes a convenient new lab starter kit or is a great refresher pack for established labs.

### details

- Convenient – order 20 great items with one catalog number
- Cost effective variety of everyday lab items at one low price
- Shatterproof – safer than glass

**Compliance:** Graduated Cylinders Meet CFR 21, Part 177.1520 and ASTM\* E 1272 Class B accuracy requirements as well as ISO Standard 6706. Beakers meet ISO/DIN 7056 International Standards for Laboratory Plasticware Accuracy.

### Nalgene Labware Value Pack

Cat. No.	Qty	Product	Size	Material
1350-0001	6	Straight-Sided Jars	500 mL	PPCO
	4	Unitary Wash Bottles	500 mL	LDPE
	2	Graduated Cylinder	100 mL	PPCO
	1	Graduated Cylinder	500 mL	PPCO
	1	Graduated Cylinder	1000 mL	PPCO
	1	Griffin Low-Form Beaker	50 mL	PPCO
	1	Griffin Low-Form Beaker	100 mL	PPCO
	1	Griffin Low-Form Beaker	250 mL	PPCO
	1	Griffin Low-Form Beaker	600 mL	PPCO
	1	Griffin Low-Form Beaker	1000 mL	PPCO
	1	Unwire™ Half-Rack, Blue	for 30 mm tubes	RMT*

*\*Resmer Manufacturing Technology*



## ► Thermo Scientific Nalgene Desiccator with Stopcock

blue polypropylene body



**Nalgene™ Desiccator with Stopcock is lighter in weight than glass and protects against breakage.**

Robust polypropylene body is compatible with all solid desiccants. Transparent PC cover allows a clear view of desiccator contents. Can be used with or without a vacuum. For room temperature use only.

### details

- Full vacuum may be applied following supplied instructions for proper performance
- Polypropylene stopcock with PTFE Plug can be used with 1/4 in. (6.4 mm) I.D. tubing (tubing sold separately)
- Vacuum connection is located on the desiccator body making the cover easier to handle
- Straight bore design eliminates stopcock vacuum leakage
- No gasket is necessary; grease makes polycarbonate cover airtight even without applying a vacuum
- Recessed rim keeps grease off benchtop when cover is set down
- Desiccator takes any standard 230 mm desiccator plate such as Cat. No. 5312-0230 (sold separately)

### Nalgene Desiccator with Stopcock

Cat. No.	Exterior H, cm (in.)	Inside Dia, cm (in.)	O.D., cm (in.)	Max Clearance Above Plate, cm (in.)	No. per Pack	No. per Case
5310-0250	26.2 (10-1/4)	24.6 (9-7/8)	33 (13)	14.3 (5-5/8)	1	4
715311-0250	Replacement Desiccator Cover, 250 mm				2	2

**Includes:** Cover and stopcock.

**Requires:** 230 mm plate.

*Notes: For room temperature only, not autoclavable.*



## ► Thermo Scientific Nalgene Desiccator Cabinets

acrylic, stainless steel latches and hinge, neoprene gasket



**Nalgene™ Desiccator Cabinets are clear, with gaskets to provide a tight seal.**

Ideal for storing anhydrous and hygroscopic biological and chemical compounds, as well as electronic assemblies and any components requiring controlled storage conditions.

### details

- Neoprene gasket on door ensures tight seal
- Door is secured with two (three on largest size) stainless steel latches and full-height hinge
- Removable, lipped tray holds solid desiccant in place
- Shelves are removable, adjustable and vented to maximize airflow
- Transparent

**Recommended for:** Ideal for storing anhydrous and hygroscopic biological and chemical compounds, as well as electronic assemblies and any components requiring controlled storage conditions.

**Ordering Information:** All cabinets measure 12 L x 12 in. W (30.5 x 30.5 cm) footprint.

### Nalgene Desiccator Cabinets

Cat. No.	H, cm (in.)	No. of Shelves	No. of Shelf Positions	No. per Case
5317-0070	17.8 (7)	2	3	1
5317-0120	30.5 (12)	3	5	1
5317-0180	45.7 (18)	4	7	1



## ► Thermo Scientific Nalgene L900 Liquid Detergent



**Nalgene™ L900 Liquid Detergent is formulated to thoroughly clean all plastic labware, especially polycarbonate.**

Environmentally-friendly formula will not cause crazing, stress cracking, or clouding of plastic when used as directed.

### details

- For hand or machine washing
- Biodegradable and non-toxic
- Will not cause crazing, stress cracking or clouding on plastic when used as directed

### Nalgene L900 Liquid Detergent

Cat. No.	Size, L	No. per Case
900-4000	4	4



## ► Thermo Scientific Nalgene Variable-Volume Dispenser

low-density polyethylene



**Nalgene™ Variable-Volume Dispensers are used for dispensing bases, aqueous solutions, and alcohols.**

Measuring chamber is calibrated in ounces and milliliters. Dispenser is leakproof<sup>†</sup> when push-pull stopper on end of stem is closed. Ring-tab fits snugly around bottle neck for attaching a label.

### details

- Designed to dispense bases, aqueous solutions and alcohols
- Measuring cup is adjustable on the vertical tube, used for controlling amount of fluid to be dispensed
- Ring-tab fits snugly around bottle neck for attaching a hang tag
- Fill cup by squeezing bottle to force liquid up the tube, release bottle pressure to draw excess liquid out of the top of the tube back into the bottle; desired volume remains in the cup
- Measuring chamber is graduated from 1 to 25 mL in 5 mL increments
- 500 mL reservoir bottle capacity
- Leakproof<sup>†</sup> (when push-pull stopper is closed for portability)

**Includes:** Low-density polyethylene bottle, graduated transparent polymethylpentene measuring chamber, polyethylene fill tube that connects bottle with chamber, polypropylene stem closure and push-pull stopper.

### Nalgene Variable-Volume Dispensers

Cat. No.	Capacity, mL (oz.)	No. per Pack	No. per Case
3702-0025	500 (16)	1	6





## ► Thermo Scientific Nalgene Dropper Bottles

natural low-density polyethylene bottle, white or multi-colored polypropylene closure, low-density polyethylene control dispensing tip



**Nalgene™ Dropper Bottles with Control Dispensing Tip provide accurate, reliable, repeatable dispensing of various reagents and is an excellent alternative to pipetting devices.**

Delivers 40  $\mu$ L drops (based on water; viscosity affects drop size), dispensed one drop at a time. Excellent chemical resistance. Suitable for most biotech, diagnostic and pharmaceutical applications.

### details

- Contact-clear natural low-density polyethylene bottle for viewing content
- Dropper control tip snaps into place for a secure fit
- Dispensing tip and closures included; chose white or multi-colored closures
- Leakproof<sup>†</sup>/Transparent

**Ordering Information:** Case of 25.



### Nalgene Dropper Bottles

Cat. No.	Capacity, mL	Closure Size, mm	Color (Bottle/Closure)	No. per Case
2750-0125	4	15-415	Clear/White	25
2750-9025	8	15-415	Clear/White	25
2750-9050	15	15-415	Clear/White	25
2752-9125	4	15-415	Clear/Assorted	25
2752-9025	8	15-415	Clear/Assorted	25
2752-9050	15	15-415	Clear/Assorted	25



## ► Thermo Scientific Nalgene Dropper Bottles

white low-density polyethylene bottle, white or multi-colored polypropylene closure, low-density polyethylene control dispensing tip



**Nalgene™ Dropper Bottles made of opaque LDPE are ideal for UV light-sensitive solutions. Provides an accurate, reliable, repeatable dispensing of various reagents and is an excellent alternative to pipetting devices.**

Delivers 40  $\mu$ L drops (based on water; viscosity affects drop size), dispensed one drop at a time. Excellent chemical resistance; suitable for most biotech, diagnostic and pharmaceutical applications.

### details

- Dropper control tip snaps into place for a secure fit
- Dispensing tip and closures included, choose from white or multi-colored caps
- Leakproof†

### Nalgene Dropper Bottles

Cat. No.	Capacity, mL	Closure Size, mm	Color (Bottle/Closure)	No. per Case
2751-9125	4	15-415	White/White	25
2751-9025	8	15-415	White/White	25
2751-9050	15	15-415	White/White	25
2753-9050	15	15-415	White/Assorted	25





## ► Thermo Scientific Nalgene Drop-Dispensing Bottles

low-density polyethylene, polypropylene dropping closure



**Nalgene™ Drop-Dispensing Bottles allow convenient, one-handed operation.**

The tethered spout cap snaps securely into place and won't pop off or leak when the closed bottle is squeezed. Dispenses one drop at a time.

### details

- Dispenses only one drop at a time for dependable delivery
- Captive spout cap stays in place when bottle is squeezed – won't accidentally dispel liquid
- Convenient one-handed operation frees up your other hand
- Chemically compatible with most acids, bases, and alcohols.
- Leakproof†

### Nalgene Drop-Dispensing Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Pack	No. per Case
2411-0015	15 (1/2)	20	12	72
2411-0030	30 (1)	20	12	72
2411-0060	60 (2)	20	12	48
2411-0125	125 (4)	24	12	48
2411-0250	250 (8)	24	6	36

### Accessories

712411-1030	Replacement Closure/Spout Cap, fits 15, 30 and 60 mL	25
712411-1125	Replacement Closure/Spout Cap, fits 125 and 250 mL	25



## ► Thermo Scientific Nalgene Drop-Dispensing Bottle

Teflon® FEP, Tefzel™ ETFE dropping closure and cap



**Nalgene™ Drop-Dispensing Bottles are ideal for dispensing strong acids/alkalis, reagents and solvents.**

Excellent chemical resistance for dispensing virtually any chemical. Tethered spout cap snaps securely into place and won't pop off or leak when the closed bottle is squeezed. Usable over a wide temperature range -105°C to +150°C.

### details

- Dispenses only one drop at a time for dependable delivery
- Captive spout cap stays in place when bottle is squeezed – won't accidentally dispel liquid
- Convenient one-handed operation frees up your other hand
- Transparent so you can easily view liquid levels
- Autoclavable/Leakproof†

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Drop-Dispensing Bottle

Cat. No.	Capacity, mL (oz.)	No. per Pack	No. per Case
2414-0030	30 (1)	1	4

## ► Thermo Scientific Nalgene Autoclavable Dispensing Bottles

polypropylene copolymer, blue polypropylene dropping closure and cap



**Nalgene™ Polypropylene Copolymer Dispensing Bottles can be used to dispense sterile solutions.**

Easily view liquid level. May be autoclaved full with cap off spout. Tethered spout cap snaps securely into place and won't pop off or leak when the closed bottle is squeezed.

### details

- Fine, steady stream when squeezed for dependable delivery
- Captive, blue polypropylene spout cap won't get lost
- Autoclavable/Leakproof†

*Notes: Only autoclave when full with tips uncapped.*

### Nalgene Autoclavable Dispensing Bottle

Cat. No.	Capacity, mL (oz.)	No. per Case
DS2420-0125	125 (4)	6
DS2420-0250	255 (8)	6



## ► Thermo Scientific Nalgene Bottles with Dropper Assembly

low-density polyethylene, neoprene bulb dispenser



**Nalgene™ Bottles with Dropper Assembly** consist of a narrow mouth Nalgene bottle with a dropping pipet and neoprene bulb inserted through the closure.

Suitable for dispensing most acids, bases and alcohols. Dispenses at a rate you control, one drop at a time or in a stream.

### details

- Contact-clear and easy to identify liquid level
- Neoprene bulb conveniently dispenses drops or a stream

#### Nalgene Bottles with Dropper Assembly

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Pack	No. per Case
2416-0060	60 (2)	20	12	48
2416-0125	125 (4)	24	6	48

## ► Thermo Scientific Nalgene One-Piece Disposable Droppers

low-density polyethylene



**Nalgene™ One-Piece Disposable Droppers** features a bellows-type bulb that delivers 30 to 35 drops per mL.

Molded in one piece, the dropper bulb provides excellent drop formation. Safe and economical with a non-wetting tapered tip and visible liquid level.

### details

- Molded in one piece, the dropper bulb provides excellent drop formation
- Safe and economical to use for repeatable performance
- Nonwetting with a tapered tip delivers 30 to 35 drops per mL
- Chemically compatible with most acids, bases and alcohols

#### Nalgene One-Piece Disposable Droppers

Cat. No.	Approx. L, mm	Capacity, mL	No. per Pack	No. per Case
6219-0068	68	1.6	100	1000



## ► Thermo Scientific Nalgene Storm Water Sampler

high-density polyethylene, ethylene propylene diene monomer gasket, polypropylene ball valve and closure



**Nalgene™ Storm Water Sampler collects a full liter first-flush grab sample into a 1000 mL Nalgene HDPE sample bottle within the first minutes of storm water outfall flow.**

Floating ball valve automatically closes off the sample port after bottle is full to prevent comingling with later run-off and volatile analyte loss. Sampling device is intended for one-time use. Ideal for collecting samples for inorganic analyses. Use with Storm Water Mounting Kit (Cat. No. 1160-1000).

### details

- Collects a full liter first flush grab sample into a 1000 mL Nalgene HDPE sample bottle within the first minutes of storm water outfall flow
- Floating ball valve automatically closes off sample port to prevent co-mingling with later run-off and volatile analyte loss
- Disposable sampling device is intended for one-time use
- Ideal for collecting samples for inorganic analyses
- View the storm water sampler demonstration video at [www.thermoscientific.com/stormwater](http://www.thermoscientific.com/stormwater)
- Leakproof† when polypropylene closure is applied

**Includes:** Sampler assembly, HDPE bottle and PP closure, and instructions for use.

**Compliance:** Meets EPA NPDES MSGP (Fed. Reg. FRL-6880-5 10/20/00) and most state grab sampling requirements.

### Nalgene Storm Water Sampler

Cat. No.	Description	Closure Size, mm	No. per Case
1100-1000	1000 mL HDPE Sampler	63	4





## ► Thermo Scientific Nalgene Storm Water Sampler

amber glass bottle, ethylene propylene diene monomer gasket, fluorinated high-density polyethylene upper dome, polypropylene ball valve and TFE™-lined closure



**Nalgene™ Storm Water Sampler is specially designed for organic analysis.**

Collects a full liter first flush grab sample into a 1000 mL amber glass sample bottle within the first minutes of storm water outfall flow. Floating ball valve automatically closes off the sample port after bottle is full to prevent co-mingling with later run-off and volatile analyte loss. Ideal for collecting samples for oil and grease and other organic analyses. Use with Storm Water Mounting Kit (Cat. No. 1160-1000).

### details

- Specially designed for collecting run-off for organic analysis
- Fluorinated upper structure prevents oil and grease from sticking to the collection device, providing a clean grab and preventing low bias recovery
- Collects a full liter first flush grab sample into a 1000 mL amber glass sample bottle within the first minutes of storm water outfall flow
- Floating ball valve automatically closes off sample port to prevent comingling with later run-off and volatile analyte loss – TFE-lined closure provided for sample transport to the lab
- Disposable sampling device is intended for one-time use
- View the storm water sampler demonstration video at [www.thermoscientific.com/stormwater](http://www.thermoscientific.com/stormwater)

**Includes:** Fluorinated sampler assembly, amber glass bottle and TFE-lined closure.

**Compliance:** Meets EPA NPDES MSGP (Fed. Reg. FRL-6880-5 10/20/00) and most state grab sampling requirements.

### Nalgene Storm Water Sampler

Cat. No.	Description	Closure Size, mm	No. per Case
1120-1000	1000 mL Amber Glass Sampler	89	4



## ► Thermo Scientific Nalgene Storm Water Mounting Kit

UV stabilized high-density polyethylene tube, 24 inch steel stake, stainless steel worm clamp and lanyard, nylon rivets, polyester screen, wire hanger, carabiner-style snap



**Nalgene™ Storm Water Mounting Kit collects only runoff – not the rain – when mounted in ditch or stream outfalls.**

Can be placed in storm water ditch, stream or grate outfalls. Use the wire hanger and carabiner-style snap to suspend the tube from a storm grate. For stream or ditch mounting, position the steel stake or a T-post in the outfall and secure the mounting tube using the stainless steel worm clamp. Position once, then reload with disposable samplers (Cat. Nos. 1100-1000 and 1120-1000 sold separately). Complete instructions included.

### details

- Can be used for ditch or stream mounting or for grate outfalls
- Simply reload with disposable samplers for next collection
- Collects only run off, not the rain, when mounted in a ditch or stream outfall
- Go to [www.thermoscientific.com/stormwater](http://www.thermoscientific.com/stormwater) to view the demonstration video

**Compliance:** Meets EPA NPDES MSGP (Fed. Reg. FRL-6880-5 10/20/00) and most state grab sampling requirements.

**Kit includes:** UV stabilized high-density polyethylene tube assembly, 24 in. steel stake, stainless steel worm clamp, wire hanger, carabiner-style snap, and complete mounting instructions.

*Notes: Complete installation instructions included.*

### Nalgene Storm Water Mounting Kit

Cat. No.	Description	Case of
1160-1000	Mounting Kit	1

## ► Thermo Scientific Nalgene Imhoff Settling Cone polycarbonate



**Nalgene™ Imhoff Settling Cone is constructed from durable polycarbonate and features a polypropylene screw closure.**

Settling cone is designed for determining settleable matter in water and waste effluent or sand content in well water. The leakproof<sup>†</sup> closure makes it possible to withdraw sediment for gravimetric analysis, and also aids in cleaning.

### details

- Designed for determining settleable matter in water and waste effluent or sand content in well water
- Closure design enables user to read graduations to zero
- Graduated from 0 to 1000 mL, with 0.1 mL increments in the 0-1 mL range
- 13 mm leakproof<sup>†</sup> screw closure at bottom for withdrawing sediments
- Autoclavable/Transparent/Graduated/Leakproof<sup>†</sup>
- Use with Imhoff Cone Rack (Cat. No. 1001-0010) sold separately

#### Settling Cone Graduation Intervals

0-1 mL	0.1 mL
1-10 mL	0.5 mL
10-20 mL	1 mL
20-40 mL	2 mL
40-100 mL	10 mL
100-500 mL	50 mL
500-1000 mL	100 mL

#### Nalgene Imhoff Settling Cone

Cat. No.	Description	No. per Pack	No. per Case
1000-0010	Settling Cone	1	4

## ► Thermo Scientific Nalgene Imhoff Cone Rack acrylic



**Nalgene™ Imhoff Cone Rack is durable and transparent.**

Wide base provides stability on the lab bench.

### details

- Durable and transparent – easily view supported cones or funnels
- Securely holds three Imhoff cones – wide base provides stability on the lab bench
- Can also be used to hold 500 and 1000 mL Nalgene separatory funnels (Cat. Nos. 4300 and 4301) or glass separatory funnels
- Transparent

#### Nalgene Imhoff Cone Rack

Cat. No.	Description	L x W x H, cm	No. per Pack	No. per Case
1001-0010	Cone Rack	19.6 x 41 x 37	1	4



## ► Thermo Scientific Nalgene Settleometer Kit



**Nalgene™ Settleometer Kit is ideal for analyzing the activated sludge process.**

An all-plastic tool for waste-water treatment plant operators – a cost-effective alternative when compared to glass equivalents. Settleometer and centrifuge tests are used in analyzing the activated sludge process.

All kit components are chemical resistant to “normal” sludge samples (pH range 3 to 10)

### details

- 2 L jar is lightweight, transparent, and impact-resistant with easy-to-read white graduations
- Paddle permits agitation of sample without scratching jar
- Centrifuge tubes feature molded-in graduations and friction-fit closures
- For tabletop centrifuges; shatterproof tubes will withstand forces up to 6000 ×g without cushions or adapters, eliminating risk of broken glass

**Recommended for:** Ideal for waste water treatment plant operators.

**Ordering Information:** Approximate jar dimensions, O.D. × H: 5-3/16 × 7-1/2 in. (13.2 × 19.1 cm). Tube dimensions, O.D. × H: 11/16 × 4-11/16 in. (1.7 × 11.9 cm).

**Includes:** Polycarbonate jar and cover, polypropylene paddle, ten 1/2 oz. (15 mL) polycarbonate conical centrifuge tubes with friction-fit polypropylene closures, an instruction booklet and data sheet.

**Compliance:** Kit has been evaluated by the National Training and Operational Technology Center (NTOTC) of the U.S. EPA and has been determined to yield results equivalent to the equipment NTOTC has used in the past.

### Nalgene Settleometer Kit

Cat. No.	Description	Approx. Jar O.D., mm	Tube Dim, O.D. x H, mm	No. per Pack	No. per Case
1010-0507	Plastic Settleometer Kit	191 x 133	17 x 119	1	4
711010-9507	Replacement Jar and Cover for Settelometer Kit	191 x 133	—	1	1

► Nalgene environmental sample bottles are now called **Nalgene Economy Bottles** and are found in the bottles section with the full line of Nalgene laboratory bottles.



## ► Thermo Scientific Nalgene Baffled Culture Flasks

polycarbonate



**Nalgene™ Baffled Culture Flasks provide an alternative to glass flasks and product equivalent growth curves with *E. coli* and *S. cerevisiae*.**

Baffled bottom increase mixing efficiency aeration and gas exchange.

### details

- Polycarbonate is break-resistant and clear – easy to read graduations help identify your liquid level with ease
- Bottom baffles provide increased mixing, aeration, and gas exchange
- Excellent for a variety of lab procedures including fermentation, cell culture growth and harvesting
- 500 and 1000 mL sizes accept either standard 38 mm stainless steel or plastic closures for added convenience
- Autoclavable

*Notes: Repeated autoclaving may result in some loss of mechanical strength.*

### Nalgene Baffled Culture Flasks

Cat. No.	Capacity, mL	No. per Pack	No. per Case
4110-0250	250	4	12
4110-0500	500	4	12
4110-1000	1000	2	6
4110-2000	2000	2	4



## ► Thermo Scientific Nalgene Erlenmeyer Flasks polypropylene copolymer



**Nalgene™ Erlenmeyer Flasks are a shatter-proof alternative to glass.**

Autoclavable polypropylene copolymer flasks provide excellent chemical compatibility with most lab reagents and solutions. Excellent for academic labs and general laboratory use. Liquid level is easy to read.

### details

- Translucent wall makes liquid level easily visible
- 2000 mL size has molded-in graduations
- Mouth sized to accept standard sized stoppers
- Designed for a long life and rigorous use, even with repeated autoclaving
- Autoclavable

### Nalgene Erlenmeyer Flasks

Cat. No.	Capacity, mL	Accepts Stopper No.	No. per Pack	No. per Case
4102-0125	125	3	12	24
4102-0250	250	6	6	12
4102-0500	500	7	4	12
4102-1000	1000	8	2	6
4102-2000	2000	10	2	6

## ► Thermo Scientific Nalgene Erlenmeyer Flasks polycarbonate



**Nalgene™ Erlenmeyer Flasks are used for preparation and storage of culture media and many culturing techniques.**

Transparent wall provides a clear view of flask contents. Safer than glass flasks – especially when used with shakers.

### details

- Molded-in graduations make liquid level estimations easy
- 500 mL size is superior combustion flask for microdetermination of fluorine
- Mouth sized to accept standard sized stoppers
- Autoclavable/Transparent/Graduated

### Nalgene Erlenmeyer Flasks

Cat. No.	Capacity, mL	Accepts Stopper No.	No. per Pack	No. per Case
4103-0125	125	5	12	24
4103-0250	250	6	6	12
4103-0500	500	7	4	12



## ► Thermo Scientific Nalgene Erlenmeyer Flasks with Screw Closure

polycarbonate, polypropylene screw closure



**Nalgene™ PC Erlenmeyer Flasks** are used for preparation and storage of culture media and many culturing techniques.

Safer than glass flasks for use in shakers. Linerless closure protects contents from spills and contamination.

### details

- Molded-in graduations make liquid levels easy to estimate
- Shatter-proof polycarbonate is safer than glass
- Noncontaminating, tight-sealing, linerless polypropylene screw closures protect contents from spills and contamination
- Autoclavable/Transparent/Graduated

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Erlenmeyer Flasks with Screw Closure

Cat. No.	Capacity, mL	Closure Size, mm	No. per Pack	No. per Case
4108-0125	125	33	6	24
4108-0250	250	38	4	12
4108-0500	500	43	4	12

## ► Thermo Scientific Nalgene Erlenmeyer Flasks with Screw Closures

polymethylpentene, polypropylene screw closure



**Nalgene™ PMP Flasks with PP Screw Closures** are useful for titrations, preparation and storage of culture media.

An excellent combination of transparency, chemical resistance, impact strength and autoclavability.

### details

- Excellent chemical resistance to a wide variety of lab reagents
- More transparent than polypropylene but with similar chemical resistance
- Ideal for preparation and storage of culture media and titrations
- All sizes have easy-to-read graduations
- Autoclavable/Graduated

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Erlenmeyer Flasks with Screw Closures

Cat. No.	Capacity, mL	Closure Size	No. per Pack	No. per Case
4109-0125	125	33	6	24
4109-0250	250	38	4	12
4109-0500	500	43	4	12
4109-1000	1000	53	2	6



## ► Thermo Scientific Nalgene Erlenmeyer Flasks with Screw Closures

Teflon® FEP, with Tefzel™ ETFE screw closure



**Nalgene™ Teflon® FEP Erlenmeyer Flasks with closures are useful with all organic solvents and concentrated oxidizing agents.**

Combine the excellent chemical resistance of Teflon® FEP with the convenience of a screw closure. These flasks are unbreakable, nearly transparent, autoclavable, non-contaminating and resist virtually all chemicals.

### details

- Excellent chemical resistance makes these flasks suitable for exposure to nearly any lab chemical
- Nearly transparent for good view of contents
- For trace metal work, can be boiled in concentrated nitric acid
- Flask withstands temperatures from -270° to +205°C (-454° to +401°F); closure from -100° to +150°C (-148° to +302°F) for a wide range of demanding applications
- Screw closure prevents spills and contamination
- Autoclavable/Teflon® FEP

**Includes:** ETFE screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Erlenmeyer Flasks with Screw Closures

Cat. No.	Capacity, mL	Closure Size, mm	No. per Pack	No. per Case
4106-0125	125	33	1	4
4106-0250	250	38	1	4



## ► Thermo Scientific Nalgene Vacuum Flask

polypropylene



**Nalgene™ Vacuum Flasks with angled tubulation are able to withstand vacuum to 30 in. Hg.**

One-piece for full vacuum service with angled tubulation to prevent tipping. This shatter-proof and light-weight, autoclavable polypropylene flask is an excellent replacement for glass flasks.

### details

- Molded in one piece to withstand full vacuum and for durability
- Tubulation at 45° angle prevents tipping when hose is attached
- Barbed adapter accepts 1/4 to 3/8 in. I.D. tubing (tubing sold separately)
- Oval marking area for ease of labeling
- Neck sized to fit standard stopper sizes (stopper not included)
- 1700 mL size is graduated
- Autoclavable

### Nalgene Vacuum Flask

Cat. No.	Capacity, mL	Accepts Stopper No.	Fits Tubing I.D. (in.)	No. per Case
DS4101-0500	500	7	1/4 – 3/8	1
DS4101-1000	1000	8	1/4 – 3/8	1
DS4101-2000	1700	10	3/8	1





## ► Thermo Scientific Nalgene Scissor-Type Forceps

polypropylene



**Nalgene™ Scissor-Type Forceps are chemically compatible with most lab reagents, and won't corrode from acid exposure.**

Double-action hinges provide extra leverage and long life. Jaws have interlocking teeth to grip objects tightly. Scissor-type handle has a ratchet to lock tips shut.

### details

- Scissor-type forceps are chemically compatible with most lab reagents – won't corrode from acid exposure
- Double-action hinges provide extra leverage and long life
- Jaws have interlocking teeth to grip objects tightly
- Scissor-type handles have a ratchet to lock tips shut and serve as a handy clamp for chromatography columns
- Autoclavable

### Nalgene Scissor-Type Forceps

Cat. No.	Description	Tip Style	No. per Pack	No. per Case
6320-0010	Polypropylene Scissor-Type Forceps	Straight, Serrated	12	72

## ► Thermo Scientific Nalgene Class B Volumetric Flasks with Screw Caps

polypropylene copolymer, polypropylene screw closure



**Nalgene™ Class B Volumetric Flasks with Screw Caps are calibrated “To Contain” and “To Deliver” at 20°C (68°F).**

Lighter in weight than glass, these break-resistant flasks protect against leakage and contamination. Excellent chemical resistance.

### details

- Break-resistant for years of dependable use in your lab
- Individually hand calibrated, permanent color graduation line; provide precision and accuracy for the life of the product
- No meniscus to confuse readings
- 200 mL size has additional line at 203 mL level for BOD and DO determinations
- Demonstrates excellent chemical resistance
- Autoclavable/Leakproof<sup>†</sup>/Graduated

**Compliance:** Meets ASTM™ E 288 and ISO 384 Class B tolerances for consistent quality and dependability.

*Notes: Autoclavable but accuracy will be affected. Completely disengage threads or remove cap before autoclaving.*

**Nalgene Class B Volumetric Flasks with Screw Caps**

Cat. No.	Capacity, mL	Closure Size, mm	Limit of Error, mL	Height with Closure, cm	No. per Pack	No. per Case
4000-0050	50	13	±0.10	14.6	1	12
4000-0100	100	20	±0.16	18.4	1	12
4000-0200	200	20	±0.20	20.9	1	12
4000-0250	250	20	±0.24	22.2	1	12
4000-0500	500	24	±0.40	27.9	1	8
4000-1000	1000	28	±0.60	31.7	1	6



## ► Thermo Scientific Nalgene Class B Volumetric Flasks with Screw Caps

polymethylpentene, polypropylene screw closure



**Nalgene™ Class B Volumetric Flasks with Screw Caps are calibrated “To Contain” and “To Deliver” at 20°C.**

Lighter in weight than glass and more transparent than polypropylene, these PMP flasks protect against leakage, breakage and contamination. Excellent chemical resistance.

### details

- Break resistance and excellent chemical resistance for years of dependable use in the lab
- Individually hand calibrated, permanent color graduation line; provide precision and accuracy for the life of the product No meniscus to confuse readings
- Autoclavable/Leakproof/Graduated

**Compliance:** Meets ASTM\* E288 and ISO 384 Class B tolerances for consistent quality and dependability.

*Notes: Autoclavable, but accuracy will be affected. Completely disengage threads or remove cap before autoclaving.*

**Nalgene Class B Volumetric Flasks with Screw Caps**

Cat. No.	Capacity, mL	Closure Size, mm	Limit of Error, mL	Height with Closure, mm	No. per Pack	No. per Case
4001-0050	50	13	±0.10	14.6	1	12
4001-0100	100	20	±0.16	18.4	1	12
4001-0250	250	20	±0.24	22.2	1	12
4001-0500	500	24	±0.40	27.9	1	8
4001-1000	1000	28	±0.60	31.7	1	6



## ► Thermo Scientific Nalgene Analytical Funnels

polypropylene copolymer



**Nalgene™ Analytical Funnels with long stems and external ridges are for use with standard filter papers.**

Outside ribbing eliminates air lock. Chemical-resistant to a wide variety of lab chemicals and reagents. A shatter-proof alternative to glass.

### details

- Body of funnel is at a 60° angle with internal ribs sloped at 58° for rapid filtration
- Outside ribbing eliminates air lock
- Shatterproof – these funnels will provide years of dependable use in your lab
- Designed for use with standard filter papers
- Autoclavable

**Nalgene Analytical Funnels**

Cat. No.	Top Dia., mm	Stem L, mm	Stem O.D., mm	Capacity, mL	Fits Paper of Dia., mm	No. per Pack	No. per Case
4250-0035	34	52	6	10	55	12	36
4250-0045	48	50	7	23	70	12	36
4250-0055	55	61	7	41	90	12	36
4250-0065	66	65	7	65	110	12	36
4250-0075	77	80	7	114	125	6	36
4250-0100	104	99	9	254	185	4	24
4250-0160	158	151	14	976	240	2	12

## ► Thermo Scientific Nalgene Powder Funnels

polypropylene copolymer



**Nalgene™ Powder Funnels are used for transferring powders.**

Parallel stem minimizes bridging of powder; external ribbing prevents air locks. Resistant to a wide range of lab chemicals and reagents. A shatter-proof alternative to glass.

### details

- Polypropylene is break-resistant and chemically compatible with a wide variety of lab reagents
- Suitable for general lab use, it is a durable replacement for glass funnels
- Autoclavable

**Nalgene Powder Funnels**

Cat. No.	Funnel Top I.D., mm	Capacity, mL	Overall H, mm	Stem Dia., mm	Stem L, mm	No. per Pack	No. per Case
4252-0065	65	68	67	16	22	12	36
4252-0080	79	115	85	16	29	12	36
4252-0100	104	243	106	21	33	6	24
4252-0150	147	716	136	27	30	4	24



## ► Thermo Scientific Nalgene Utility Funnels

polypropylene or high-density polyethylene



**Nalgene™ Utility Funnels are suitable for numerous lab applications and are a shatter-proof alternative to glass funnels in the lab.**

### details

- Cat. Nos. 4256-0234 and 4256-0414 are made from shatter-proof, autoclavable polypropylene
- Cat. No. 4256-0638 has a large throat opening for faster transfer of materials and is made from shatter-proof high-density polyethylene (not autoclavable)
- Suitable for a wide variety of lab applications

#### Nalgene Utility Funnels

Cat. No.	Funnel Top I.D., mm	Capacity, mL	Overall H, mm	Stem Dia., mm	Stem L, mm	No. per Pack	No. per Case
<b>Polypropylene (Autoclavable)</b>							
4256-0234	65	62	65	10	21	12	288
4256-0414	103	270	117	11	34	12	144
<b>High-density polyethylene (Not Autoclavable)</b>							
4256-0638	155	1059	176	26	67	12	72

## ► Thermo Scientific Nalgene Large Funnels

high-density polyethylene



**Nalgene™ Large Funnels have external and internal ribbing for air release.**

Shatterproof funnel is a safer alternative to glass.

### details

- HDPE is shatter-proof, making it a reliable long-term tool for the lab
- Has internal and external ribbing for fast flow

#### Nalgene Large Funnels

Cat. No.	Top Dia., mm	Capacity, L	Overall H, mm	Stem L, mm	No. per Pack	No. per Case
4262-0080	201	1.90	245	89	1	6
4262-0110	258	4.06	300	92	1	6

## ► Thermo Scientific Nalgene Heavy-duty Funnels

low-density polyethylene



**Nalgene™ LDPE Funnels are the toughest large funnels available. Made of low-density polyethylene, they are lightweight and won't break or corrode like glass or metal funnels.**

Designed for years of rugged use in the lab.

### details

- Durable large funnels are designed for heavy-duty use
- Lighter weight than glass or metal funnels and they won't break or corrode, providing you with long-term use
- Rigid construction, ideal for vacuum filtration; features ribs and a tab

Nalgene Heavy-duty Funnels

Cat. No.	Top Dia., mm	Capacity, mL (oz.)	Overall H, mm (in.)	Stem O.D., mm	Stem L, mm	No. per Pack	No. per Case
4260-0040	101	254	146	12	72	2	12
4260-0060	152	777	196	15	76	1	12
4260-0100	248	3684	319	23	117	1	2

## ► Thermo Scientific Nalgene Büchner Two-Piece Funnels

polypropylene



**Nalgene™ Büchner Funnels are constructed in two pieces and are lightweight and durable.**

Bottom and top can be separated for easy cleaning – won't chip, crack, or break.

### details

- Sturdy funnels consist of cup and funnel with perforated plate for easy cleaning and good chemical resistance
- All sizes are made entirely of polypropylene and are autoclavable to 135°C (275°F)
- Lightweight and durable – won't break or shatter like glass
- Autoclavable

Nalgene Buchner Two-Piece Funnels

Cat. No.	Inside Dia. (Top), mm	Capacity, mL	Fits Paper Size, mm	Stem L, mm	No. per Pack	No. per Case
4280-0550	59	83	55	45	1	8
4280-0700	76	186	70	65	1	6
4280-0900	93	358	90	71	1	4
4280-1100	130	919	110	93	1	4
4280-1500	172	2910	150	107	1	4



## ► Thermo Scientific Nalgene Separatory Funnels

polypropylene copolymer, Teflon® TFE stopcock and housing, polypropylene screw closure



**Nalgene™ PCO Separatory funnel and PP screw closure are chemically resistant, translucent and autoclavable.**

Polypropylene copolymer body and Teflon® TFE stopcock assembly has excellent chemical resistance, is leakproof† and does not require lubrication.

### details

- Separation lines between immiscible liquids easily observed
- Phase interface is observable down to the stopcock
- TFE stopcocks need no lubrication; saves time and no messy grease
- Funnel is chemically compatible with a wide range of lab reagents
- Funnels are susceptible to softening and swelling from extended exposure to aggressive solvents though the effect is reversible
- Autoclavable/Leakproof†

**Ordering Information:** Stem lengths, 65 mm.

*Notes: Autoclavable except for stopcock assembly, which is easily removed and chemically sterilized.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Separatory Funnels

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Pack	No. per Case
4300-0125	125 (4)	28	1	6
4300-0250	250 (8)	33	1	4
4300-0500	500 (16)	43	1	4
4300-1000	1000 (32)	53	1	4
<b>Accessories</b>				
714301-1025	Replacement Stopcock Assembly for 125 mL-1 L Separatory Funnel		1	1



## ► Thermo Scientific Nalgene Separatory Funnels

Teflon® FEP, Tefzel® ETFE closure, Teflon® TFE screw closure



**Nalgene™ FEP Separatory funnel and ETFE screw closure are chemically inert, nearly transparent and autoclavable.**

More transparent than our polypropylene separatory funnels. This funnel is compatible with all common lab reagents and solvents. Won't chip, crack or shatter like glass separatory funnels. Teflon® FEP stopcock assembly has excellent chemical resistance, is leakproof† and does not require lubrication – can be chemically disinfected.

### details

- So transparent that phase interface is visible down to the stopcock and nonwetting surface – enhances complete drainage
- Break-resistant and impervious to any chemical used in a separatory funnel
- No phthalates to contaminate analyses
- Useful in hazardous separations
- Autoclavable/Leakproof†

**Ordering Information:** Stem lengths, 65 mm.

*Notes: Autoclavable except stopcock assembly, which is easily removed and chemically sterilized.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Separatory Funnels

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Pack	No. per Case
4301-0125	125 (4)	28	1	4
4301-0250	250 (8)	33	1	4
4301-0500	500 (16)	43	1	4
4301-1000	1000 (32)	53	1	4
4301-2000	2000 (64)	53	1	2

### Accessories

714301-1025	Replacement Stopcock Assembly for 125 mL-1 L Separatory Funnel	1	1
714301-1050	Replacement Stopcock Assembly for 2 L Separatory Funnel	1	1



## ► Thermo Scientific Nalgene Mason Jars

polypropylene copolymer, white polypropylene screw closures



**Nalgene™ Mason Jars are ideal for fluid transfer in the lab or field when used with fluid-transfer closure (Cat. No. DS2153-0700).**

The 70 mm neck on these bottles fits various blenders, fixtures and closures with Mason jar threads.

### details

- 70 mm neck designed to fit fixtures or closures with Mason Jar threads or with Osterizer™ or other blenders with the same threads
- Wide mouth is easy to fill or sample
- Autoclavable

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving.*

### Nalgene Mason Jars

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2115-0500	500	70	61	75	175	6	24
2115-1000	1000	70	61	94	213	6	24
2115-2000	2000	70	61	120	244	4	12
2115-3000	3000	70	61	155	246	1	6
<b>Accessories</b>							
712154-0700	Replacement Mason Jar Closure, PP, 70 mm						12





## ► Thermo Scientific Nalgene Fluid-Transfer Closure

white polypropylene



**Nalgene™ Fluid-Transfer Closure has a 70 mm closure that works with Nalgene Mason Jars (Cat. No. 2115) for fluid transfer in the lab or field.**

Can also be used with 125 and 500 mL Nalgene Straight-sided jars (Cat. Nos. 2116, 2117, 2118, 2119), sold separately. Use for siphoning, evacuation, bleeding of fluid lines, collecting samples or transferring reagents. Two vent ports are molded into the top of the closure, allowing for external connection to a vacuum or pressure pump with 1/4 in. I.D. flexible tubing (tubing sold separately).

### details

- 70 mm closure fits on Nalgene Mason Jars or 125 and 250 mL straight-sided jars for a perfect fit
- Use for a wide variety of fluid transfers such as siphoning, evacuation, bleeding of fluid lines, collecting samples or transferring reagents
- External port tubes are molded into closure for longer life, (no connection for internal drop tubes)
- Port tubes accept 1/4 in. flexible tubing, sold separately
- Vacuum limit: 5 in. (127 mm) Hg; Pressure limit: 2 psig (0.137 bar)
- Autoclavable

### Nalgene Fluid-Transfer Closure

Cat. No.	Neck Finish, mm	No. per Case
DS2153-0700	70	6



## ► Thermo Scientific Nalgene Straight-Sided Wide-Mouth Jars

polycarbonate, polypropylene screw closure



### Nalgene™ Straight-sided Wide-Mouth Jars are window-clear.

A wide temperature range (-135°C to +135°C) makes these jars an excellent choice for cold room and refrigerator. These high impact-resistant jars are extremely versatile for collecting and storing a wide variety of specimens and lab supplies. Not liquid leakproof.

#### details

- Excellent for cold room and refrigerated use – easy to see contents
- Wide-mouth and straight sides provide full-access and complete sample retrieval
- High impact-resistant jars are extremely versatile for collecting and storing pastes, solids, specimens and lab supplies
- 15, 30 and 60 mL jars have natural polypropylene closures
- 125 mL to 1 L jars have white polypropylene closures with recessed tops for stacking
- 125 and 250 mL sizes fit Osterizer™ and other blenders that have Mason Jar threads; recommended for use with Fluid Transfer Closure Cat. No. DS2153-0700
- Autoclavable/Transparent

**Includes:** Polypropylene screw closures.

*Notes: Completely disengage threads or remove cap before autoclaving. Not liquid leakproof; not recommended for liquid transport.*

#### Nalgene Straight-Sided Wide-Mouth Jars

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2116-0015	15	38	29	31	46	4	48
2116-0030	30	43	33	36	48	4	48
2116-0060	60	53	43	48	45	4	48
2116-0125	125	70	64	64	74	4	24
2116-0250	250	70	64	75	119	4	24
2116-0500	500	120	112	112	88	4	16
2116-1000	1000	120	112	112	151	4	16

### ► Select the perfect container for your application.

Go to: [www.thermoscientific.com/nalgenecontainers](http://www.thermoscientific.com/nalgenecontainers)  
or download our free apps from iTunes or the Android market  
– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Straight-Sided Wide-Mouth Jars

polymethylpentene, polypropylene screw closure



**Nalgene™ PMP Straight-sided Wide-Mouth Jars offer good clarity with excellent chemical resistance.**

Excellent museum jars – only 2% loss of formaldehyde per year. Lighter in weight than glass, these jars protect against breakage and contamination. Not liquid leakproof.

### details

- Good clarity with excellent chemical resistance make these jars versatile in your lab
- Excellent museum jars, with only 2% loss of formaldehyde per year
- Wide mouth and straight sides provide full-access and complete sample retrieval
- 125 and 250 mL sizes fit Osterizer\* and other blenders that have Mason Jar threads
- 60 mL jars have natural polypropylene closures
- 125 mL to 1 L jars have white polypropylene closures with recessed tops for stacking.
- Autoclavable/Transparent

**Includes:** Polypropylene screw closures.

**Compliance:** Meets requirements of CFR21, Part 177.1520 for food and beverage use.

*Notes: Completely disengage threads or remove cap before autoclaving. Not liquid leakproof; not recommended for liquid transport.*

### Nalgene Straight-Sided Wide-Mouth Jars

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2117-0060	60	53	43	48	45	4	48
2117-0125	125	70	64	64	74	4	24
2117-0250	250	70	64	75	119	4	24
2117-0500	500	120	112	112	88	4	16
2117-1000	1000	120	112	112	151	4	16



## ► Thermo Scientific Nalgene Straight-Sided Wide-Mouth Jars

polypropylene copolymer, white polypropylene screw closure



**Nalgene™ Translucent PP Wide-Mouth Jars have excellent chemical resistance and can be autoclaved repeatedly.**

Recommended for storing pastes, solids, specimens and lab supplies.  
Not liquid leakproof.

### details

- Translucent with excellent chemical resistance and repeated autoclavability – these jars are versatile in your lab
- Wide-mouth and straight sides provide full-access and complete sample retrieval
- 15, 30 and 60 mL jars have natural polypropylene closures
- 125 mL to 1 L jars have white polypropylene closures with recessed tops for stacking
- 125 and 250 mL sizes fit Osterizer™ and other blenders that have Mason Jar threads; recommended for use with Fluid Transfer Closure Cat. No. DS2153-0700
- Autoclavable

**Includes:** Polypropylene screw closures.

*Note: Not liquid leakproof; not recommended for liquid transport. Completely disengage threads or remove cap before autoclaving. For 500 mL and 1 L sizes, remove closure and autoclave separately.*

### Nalgene Straight-Sided Wide-Mouth Jars

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2118-9050	15	38	29	31	46	12	72
2118-0001	30	43	33	36	48	12	72
2118-0002	60	53	43	48	45	12	48
2118-0004	125	70	64	64	74	12	36
2118-0008	250	70	64	75	119	6	36
2118-0016	500	120	112	112	88	6	24
2118-0032	1000	120	112	112	151	6	24



## ► Thermo Scientific Nalgene Straight-Sided Jar and Mason Jar Replacement Closures polypropylene



**Nalgene™ Straight Sided Jar and Mason Jar Replacement Screw Closures are designed to fit Nalgene containers.**

### details

- Made to fit Nalgene Straight Sided Jars and Mason Jars (Cat. Nos. 2116-, 2117-, 2118- and 2115-)
- Autoclavable

*Notes: Before autoclaving, disengage threads. Set top to side of straight sided jar when autoclaving to avoid deforming container.*

### Nalgene Straight Sided Jar and Mason Jar Replacement Closures

Cat. No.	Closure Size, mm	Color	No. per pkg	No. per Case
712150-0430	43	Natural	12	12
712150-0530	53	Natural	12	12
712154-0700	70	White	12	12
712155-1200	120	White	12	12





## ► Thermo Scientific Nalgene Jars with Cover polypropylene



**Nalgene™ PP Jars with Cover** are designed for storing and transporting solids.

Chemically compatible with a wide range of lab materials. Larger size makes an excellent waste crock.

### details

- Straight sides and no neck make access and retrieval easy
- Larger sizes make excellent waste crocks
- Chemically compatible with a wide range of lab materials
- Autoclavable

### Nalgene Jars with Cover

Cat. No.	Capacity, L	O.D. x H, cm	No. per Pack	No. per Case
5352-0002	2.2	13.3 x 19.1	1	6
5352-0004	4.6	16.8 x 23.9	1	6

## ► Thermo Scientific Nalgene Jars with Cover polycarbonate



**Nalgene™ PC Multipurpose Jars with Cover** are useful as water baths, aquaria, terraria or freeze-drying chambers.

Drill, tap or apply clamps to attach heating or cooling equipment. May be used over a wide temperature range (-135°C to +135°C). Flat lids permit stacking to save space.

### details

- Drill, tap or apply clamps to jars to attach heating or cooling equipment
- Very durable 1/8 in. thick walls make these jars useful as water baths, aquaria, terraria or freeze-drying chamber
- Autoclavable

*Notes: Jar DS5300-0507 is suitable for vacuum applications if not autoclaved.*

### Nalgene Multipurpose Jars with Cover

Cat. No.	Capacity, L (gal.)	O.D. x H, cm (in.)	No. per Case
DS5300-0507	2.2 (1/2)	13.3 x 19 (5-1/4 x 7-1/2)	1
DS5300-9212	4.7 (1)	17 x 23.7 (6-3/4 x 9-3/8)	1
DS5300-9609	8.3 (2)	22.2 x 25.3 (9 x 10)	1
DS5300-9910	18.8 (4.5)	30.2 x 30.2 (12 x 12)	1





## ► Thermo Scientific Nalgene Hydrometer Jar polymethylpentene



**Nalgene™ Hydrometer jars are lighter in weight than glass and protect against breakage.**

This transparent, autoclavable jar exhibits superior chemical resistance and a broad base make this a very stable addition to the lab.

### details

- Lighter in weight than glass – won't break
- Versatile jar can also be used as a lactometer cylinder
- Superior chemical resistance and broad base provide stability
- Autoclavable/Transparent

*Notes: Hydrometer not included.*

### Nalgene Hydrometer Jar

Cat. No.	Capacity, mL	Material
6230-0500	500	Polymethylpentene



## ► Thermo Scientific Nalgene Lab Notebooks with PolyPaper Pages

uncoated PolyPaper pages, polyethylene cover



**Nalgene™ Lab Notebooks for permanently securing your valuable notes and data in a hardcover case-bound paginated book.**

This lab notebook is extremely chemical resistant, making it durable for lab use. Pages include spaces for dates and signatures necessary documentation for securing patent protection.

### details

- Case-bound hardcover with 100 permanently-bound, polyolefin pages that are chemical resistant
- Pages are numbered and printed with spaces for dates, signature of worker and witness for patent protection
- 23 x 29 cm (9-1/4 x 11-1/4 in.) pages are ruled with a fine green 6 mm (1/4 in.) grid to assist for orderly note keeping, drawings and charts
- Accepts ballpoint pen and permanent marking pen
- Permanently bound and paginated for data security and traceability

**Includes:** Instructions for keeping records, page for issuing book and table of contents.

### Nalgene Lab Notebooks with PolyPaper Pages

Cat. No.	Cover Color	Cover Dimensions, cm (in.)	Page Dimensions, cm (in.)	Page Format	No. per Pack	No. per Case
6300-1000	Black	24.1 x 29.2 x 1.59 (9-1/2 x 11-1/2 x 5/8)	23.5 x 28.6 (9-1/4 x 11-1/4)	1/4 in. grid	1	6



## ► Thermo Scientific Nalgene Laboratory Notebooks with Regular Paper Pages polyethylene cover



**Nalgene™ Lab Notebooks feature 96 permanently sewn-in paper pages with either grid or horizontal ruled lines.**

Hard cover is durable and waterproof. Pages include spaces for dates and signatures, necessary documentation for securing patent protection as well as instructions for keeping records, table of contents and a page for issuing contents.

### details

- Spaces for dates, signature of worker and witness for patent protection
- Choose forest green cover with green grid or burgundy cover with horizontal lines
- Page size: Letter (8-1/2 × 11 in.) or A4 (8-3/4 × 11-1/4 in.)
- Permanently bound and paginated for data security and traceability

**Includes:** Instructions for keeping records, page for issuing book and table of contents.

*Notes: Pages are not waterproof.*

### Nalgene Lab Notebooks with Regular Paper Pages

Cat. No..	Colors	Page dimension, cm (in.)	Line/grid spacing	No. per pkg.	No. per Case
6301-1000	Forest Green	21.6 x 27.9 (8-1/2 x 11)	6 mm grid	1	6
6301-2000	Burgundy	21.6 x 27.9 (8-1/2 x 11)	3 horizontal lines per inch	1	6
6301-3000	Forest Green	22.2 x 28.6 (8-3/4 x 11-1/4)	5 mm grid	1	6
6301-4000	Burgundy	22.2 x 28.6 (8-3/4 x 11-1/4)	5 mm lines	1	6

## ► Thermo Scientific Nalgene Deluxe Laboratory Notebooks with Regular Paper Pages polyethylene cover



**Nalgene™ Deluxe Lab Notebooks with 184 high-quality, acid-free paper pages with 1/4 in. grid.**

Double the pages of our other lab notebooks. Specially designed for process record keeping and ideal for research laboratories in securing patent protection. Cover is water-resistant and easy to wipe clean.

### details

- Features water-resistant polyethylene cover and 184 high-quality, acid-free, paper pages with 1/4 in. grid lines
- Permanently bound and paginated for data security and traceability
- Letter-sized 8-1/2 × 11 in. pages are permanently bound and sewn
- Pages include place for preparer and witness signatures to aid in securing patent protection

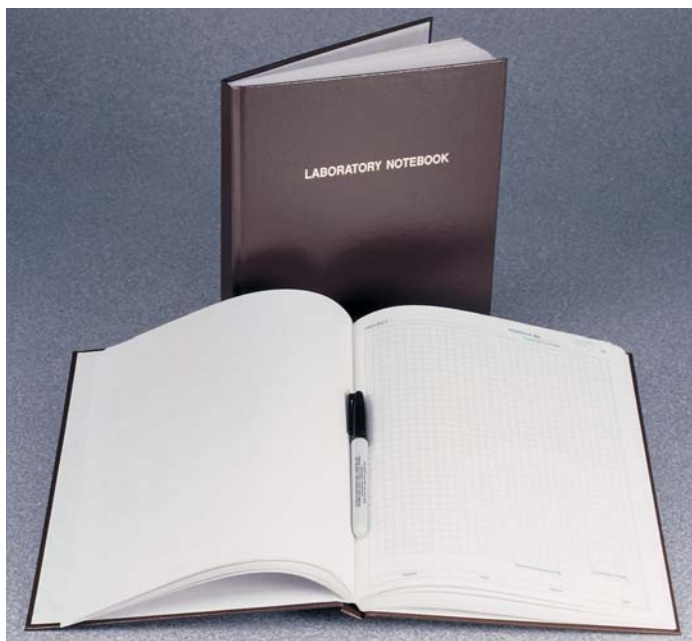
### Nalgene Deluxe Laboratory Notebook with Regular paper pages

Cat. No..	Cover color	O.D., (L x W x D), cm (in.)	Page dimension, cm (in.)	Grid size, in.	No. per pkg	No. per Case
6501-1000	Burgundy	22.5 x 28.6 x 1.6 (8-7/8 x 11-1/4 x 5/8)	21.6 x 27.9 (8-1/2 x 11)	1/4 in.	1	6



## ► Thermo Scientific Nalgene Duplex Lab Notebooks

duplex format, paper pages, brown polyethylene cover



**Nalgene™ Laboratory Notebooks come with sewn-in paper pages in a duplex format, and a durable polyethylene cover.**

Pages are printed on one side only with an identically numbered duplicate behind it, designed for copying notes or for use with carbon paper (not included). Contains 50 numbered sets (100 total sheets) of regular gridded paper.

### details

- Pages are printed on one side only and gridded
- Brown waterproof cover is easy to wipe clean
- Each page is followed by an identically numbered, perforated page for easy removal
- Contains 50 numbered sets (total of 100 sheets)
- Page size: 8-1/2 × 11 in.
- Pages printed with 1/4 in. grid

*Notes: Carbon paper is not supplied with notebooks.*

### Nalgene Lab Notebooks

Cat. No.	Description	Overall Dimension, (L x W x D), cm (in.)	Page Dimensions, (L x W x D) cm (in.)	No. per Pack	No. per Case
6302-1000	50 numbered sets (total of 100 sheets)	22.5 x 28.6 x 1.6 (8-7/8 x 11-1/4 x 5/8)	21.6 x 27.9 (8-1/2 x 11)	1	6



► **Thermo Scientific Nalgene Field Notebook, Spiral-Bound**  
polyolefin pages, blue polyethylene cover



**Nalgene™ Field Notebook, Spiral-bound is ideal where moisture or chemicals may present a problem.**

Flexible, yet durable cover with sheets permanently spiral-bound and paginated for data security and traceability. Includes 96 plastic pages printed with a grid on both sides. Polyolefin pages hold up to repeated wetting and chemical exposure. Book opens to lay flat. Cover and pages can be turned to the back to leave only the page at hand exposed to save workspace.

#### details

- Blue polyethylene cover with 48 treated Polyolefin 9 × 11-1/4 in. pages and plastic spiral binding
- Pages numbered 1 through 96 and printed with fine green 1/4 in. (6 mm) grid
- Pages are washable and they dry flat
- Plastic pages protect your data; repels salt water, mud, chemicals and dirt
- Spiral notebook lies flat for easy use in the field
- Accepts almost all writing devices including ballpoint pen, felt-tip marker, indelible and grease pencils. Does not accept pencil.

**Includes:** Instructions for accepted notebook procedures, table of contents, page for issuing notebook.

*Notes: Sheets do not accept pencil.*

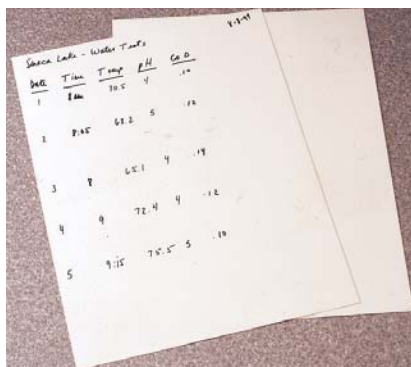
#### Nalgene Field Notebook, Spiral-bound

Cat. No.	Description	Page size, cm (in.)	Grid size, in.	No. per pkg	No. per Case
6303-1000	Polypaper Field Notebook	23 x 29 (9 x 11-1/4)	1/4	1	6



## ► Thermo Scientific Nalgene Polyolefin Plastic Paper Sheets

polyolefin pages



**Nalgene™ Polyolefin Plastic Paper Sheets roll or fold without cracking, stay flexible at cold temperatures and won't rip, stretch or shrink.**

These durable sheets can be punched for use in binders or cut into labels to be enclosed with wet or dry chemical or biological samples stored in formalin. Excellent for field data collection and chain-of-custody records.

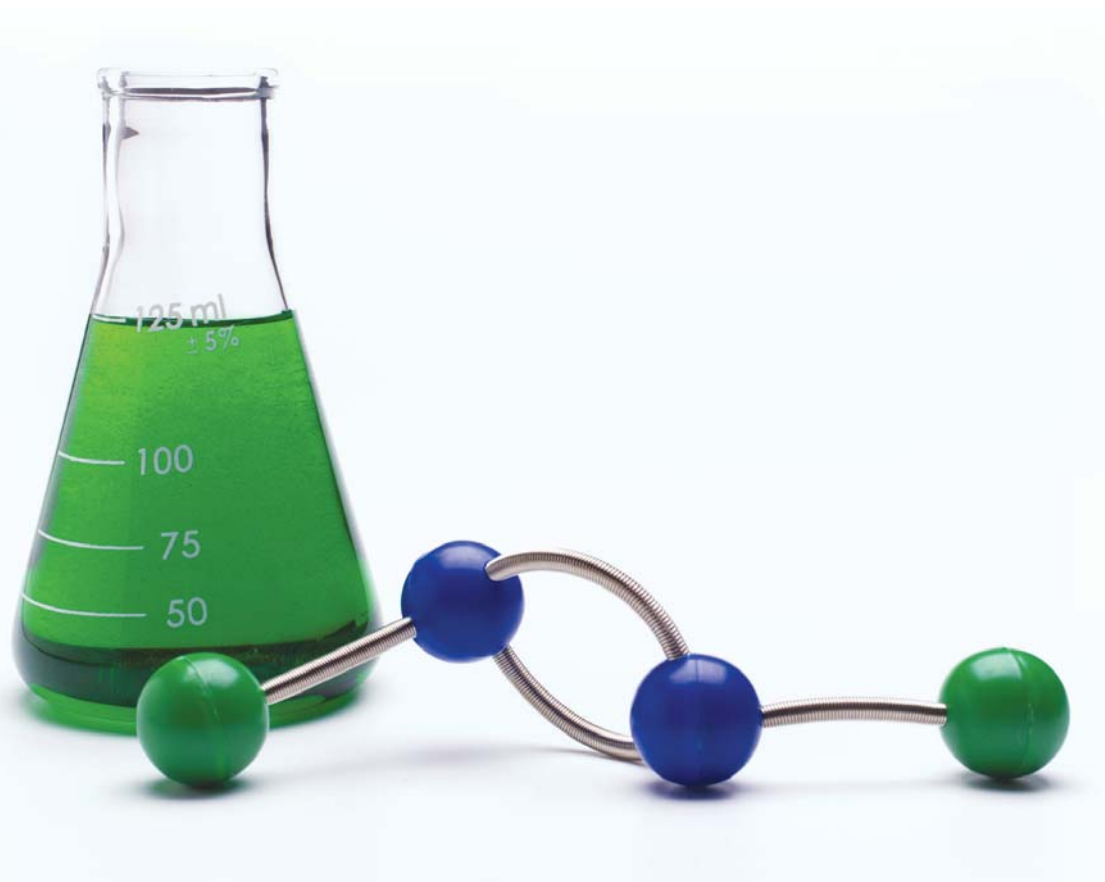
### details

- Resist UV light, tearing, fraying, curling, aging, discoloration, rot and mildew
- Roll or fold without cracking
- Remain flexible at cold temperatures
- May be punched for use in three-ring binders
- Cut into labels for enclosing with wet or dry chemicals and biological samples stored in formalin
- Can be written on with almost any pen, marker, type or print (does not accept pencil).

*Notes: Sheets do not accept pencil.*

### Nalgene Polyolefin Plastic Paper Sheets

Cat. No.	L x W, cm (in.)	No. per Pack	No. per Case
6304-9811	27.9 x 21.6 (11 x 8-1/2)	50	300







## ► Thermo Scientific Nalgene Polyolefin Pressure-Sensitive Labels

polyolefin



**Nalgene™ Polyolefin labels won't wrinkle, curl or melt when used in photocopiers, laser or inkjet printers.**

Polyolefin labels are waterproof and resist most chemicals, while accepting a variety of inks including copier, marker, ballpoint, gels and technical markers, making them indispensable in the lab. Does not accept pencil. Pretest specific inks for suitability prior to use. Formatted for easy setup in most word processing label printing programs (instructions included).

### details

- Durable polyolefin labels resist ultraviolet light, mildew, chemicals and dirt and won't discolor, crack or tear
- Adhesive backing sticks well to any plastic, glass or metal surface – excellent for labeling microscopic slides
- Chemically compatible with most lab reagents although solvents may dissolve adhesive
- Rated to work in freezers without curling or detaching to -29°C
- For use with all writing devices except pencil
- Autoclavable

### Nalgene Polyolefin Pressure-Sensitive Labels

Cat. No.	H x W, mm (in.)	No. labels per sheet	No. labels per Pack	No. labels per Case
6319-0010	22 x 22 (7/8 x 7/8)	80	800	4000
6319-0015	20 x 38 (3/4 x 1-1/2)	65	650	3250
6319-0020	25 x 67 (1 x 2-1/2)	30	300	1500
6319-0030	13 x 44 (1/2 x 1-3/4)	80	800	4000
6319-0040	51 x 102 (2 x 4)	10	100	500



## ► Thermo Scientific Nalgene Right-To-Know Custom Labeling System

polyolefin with clear plastic overlay



**Nalgene™ Right-To-Know Customer Labeling System is ideal for creating labels for dispensing bottles that identify the chemical within and its properties.**

Create your own safety label specific to chemical contents stored in your container. Labels adhere to the container and have a clear plastic overlay to protect the label markings from coming off due to chemical contact. Refer to the appropriate Material Safety data sheet (MSDS) or other reference material to verify the correct codes. Complete instructions included with each package.

### details

- Overlay is provided to protect label from chemical contact
- Ability to refer to the appropriate Material Safety Data Sheet (MSDS) or other reference material to verify the correct codes required for accurate and safe use.
- Complete instructions included with each package – hazard symbol stickers are GHS compliant

#### Nalgene Right-To-Know Custom Labeling System

Cat. No.	L x W, mm (in.)	No. per Pack	No. per Case
6316-1000	76.2 x 127 (3 x 5)	25	150

## ► Thermo Scientific Nalgene Lab Markers

black ink



**Nalgene™ Lab Markers are recommended for use with Nalgene Polyolefin paper, notebooks and labels.**

Nalgene Lab Markers are indispensable around the lab. They write on almost any surface, including glass, metal or plastic. Choose from a fine point pen or broad line marker for permanently marking almost anything. Caps have a clip to keep them handy in a lab coat or shirt pocket.

### details

- Felt-tip marking pens with convenient pocket clips
- Choose fine-line pen or broad-line marker depending on your requirement
- Dependably writes on glass, plastic or metal

#### Nalgene Lab Markers

Cat. No.	Description	No. per Pack	No. per Case
6310-0010	Lab Pen, Fine Line	4	12
6311-0010	Lab Marker, Broad Point	4	12

## ► Thermo Scientific Nalgene Pipet Box Holder acrylic



**Nalgene™ Pipet Box Holders accommodate bags, boxes, pipet canisters or 1 to 100 mL individually wrapped serological pipets.**

Compartments sized to fit one box of pipets 5-3/4 in. long. Dividers are removable to form larger storage areas that accommodate a wide variety of lab supplies.

### details

- Clear acrylic organizers allow you to view their contents easily and keep your small lab items neatly organized and within reach
- Can withstand brief exposure to dilute acids, and bases
- Cat. No. 6810-0002 has up to two horizontal compartments
- Cat. No. 6810-0004 has up to four compartments positioned at an angle providing ergonomic access and prevents pipets from sliding out

**Caution:** Alcohols, organic solvents and strong acids may cause immediate damage.

Nalgene Pipet Box Holder

Cat. No.	Description	No. of Compartments	O.D., L x W x H, cm (in.)	Units per Case
5810-0002	Pipet Box Holder	2	15.2 x 15.2 x 38.1 (6 x 6 x 15)	1
5810-0004	Angled Pipet Holder	4	8.9 x 41.6 x 29.2 (3-1/2 x 16-3/8 x 11-1/2)	1

## ► Thermo Scientific Nalgene Dispensing Bins acrylic



**Nalgene™ Dispensing Bins provide convenient, easy dispensing of small lab items.**

This all purpose bin can be used to store small laboratory supplies. Top dispensing bin has two compartments and a divider that can be removed to create one larger compartment and a hinged dust cover keeps items clean. Front dispensing bin is hinged at front for easy access or item removal.

### details

- Clear acrylic organizers allow you to view their contents easily and keep your small lab items neatly organized and within reach
- Can withstand brief exposure to dilute acids and bases

**Caution:** Alcohols, organic solvents and strong acids may cause immediate damage.

Nalgene Dispensing Bins

Cat. No.	Description	O.D., L x W x H, cm (in.)	No. per Case
5830-0001	Top Dispensing Bin	15.2 x 15.2 x 15.2 (6 x 6 x 6)	1
5830-0002	Front Dispensing Bin	15.2 x 15.2 x 15.2 (6 x 6 x 6)	1



## ► Thermo Scientific Nalgene Parafilm Dispensers acrylic



**Nalgene™ Parafilm™ Dispenser is used to hold rolls securely for easy dispensing.**

Acrylic dispenser can hold one box of 4 in. film or two boxes of 2 in. film. Channeled front allows cutting Parafilm. Storage for blade include, but blade is not included.

### details

- Channeled front allows cutting Parafilm
- Holds one box of 4 in. film or two boxes of 2 in. film securely in place

*Notes: Storage for blade included, but blade is not included.*

#### Nalgene Parafilm Dispenser

Cat. No.	Description	No. per Case
5833-0001	Acrylic Parafilm Dispenser	1

## ► Thermo Scientific Nalgene Stackable Drawer, All Purpose acrylic



**Nalgene™ Stackable Drawers nest for high-density storage and can be mounted under a shelf or cabinet with provided screws.**

### details

- Clear acrylic organizers allow you to view their contents easily and keep your small lab items neatly organized and within reach
- Can withstand brief exposure to dilute acids and bases

**Caution:** Alcohols, organic solvents and strong acids may cause immediate damage.

#### Nalgene Stackable Drawer, All Purpose

Cat. No.	O.D., L x W x H, cm (in.)	No. per Case
5832-0001	11.4 x 22.9 x 22.9 (4-1/2 x 9 x 9)	1



## ► Thermo Scientific Nalgene Pipetter Rack and Stand

acrylic



**Nalgene™ Pipetter Rack and Stand allow convenient, safe handling of pipettors used with radioisotopes.**

Keep your pipettors within reach and behind your beta shield with this convenient rack. Holds four standard size pipettors. Hang rack on any benchtop beta shield or on its own stand as shown. Declutters work areas.

### details

- Stand is 3/8 in. (9 mm) thick acrylic and works as a mini beta shield
- Holds 4 standard size pipettors

*Notes: Pipettors sold separately.*

### Nalgene Pipetter Rack and Stand

Cat. No.	Description	O.D., H x W x D, cm (in.)	No. per Case
6803-0001	Acrylic Pipetter Rack and Stand	15.2 x 26.0 x 10.2 (6 x 10-1/4 x 4)	1

## ► Thermo Scientific Nalgene Utility Boxes

styrene-acrylonitrile, white low-density polyethylene lid with white SAN insert



**Nalgene™ Utility Boxes are available in four different sizes and shapes for multipurpose lab storage.**

Cat. No. 5700-0500 is ideal for electrophoresis gels. Lids snap securely into place. Stackable; rounded corners for easy cleaning. Clear wall allows easy view of contents.

Attractive, easy-to-clean, general purpose laboratory storage boxes. Not leakproof.

### details

- Manufactured from clear styrene-acrylonitrile with tight-fitting, molded, white, LDPE lids that include inserts to store and keep items dry and secure
- Stackable for high-density storage
- Cat. No. 5700-0500 is ideal for electrophoresis gels

### Nalgene Utility Boxes

Cat. No.	Capacity, mL	L x W x H, cm (in.)	No. per Pack	No. per Case
5700-0325	325	12.9 x 7.5 x 5.9 (5 x 3 x 2-3/8)	4	24
5700-0500	500	19.1 x 15.6 x 3.7 (7-1/2 x 6 x 1-1/2)	2	12
5700-1000	1000	12.7 x 7.3 x 17.5 (5 x 3 x 7)	2	12
5700-2000	2000	19.1 x 15.4 x 9.4 (7-1/2 x 6 x 4)	1	8



## ► Thermo Scientific Nalgene Large Sterilizing Pans

polypropylene



**Nalgene™ Large Sterilizing pans are useful for drying and sterilizing instruments and labware or for collecting and washing soiled lab equipment.**

Rolled edges provide extra stiffness and durability for these heavy-duty pans; molded-in handles for easy carrying.

### details

- Pans are tapered for nesting to save space
- Rolled edges provide extra stiffness for carrying heavy contents
- Heavy wall construction will withstand rugged use and repeated sterilizing
- Autoclavable

**Nalgene Large Sterilizing Pans**

Cat. No.	Capacity, L (qts.)	L x W x H, mm (in.)	No. per Pack	No. per Case
6900-0010	9.5 (10)	361 x 311 x 143 (14-1/4 x 12-1/4 x 5-5/8)	1	6
6900-0020	14.2 (15)	543 x 435 x 130 (21-3/8 x 17-1/8 x 5-1/8)	1	6

## ► Thermo Scientific Nalgene Autoclavable Pans

polypropylene



**Nalgene™ Pans can be used repeatedly for autoclaving instruments and labware.**

Heavy-duty construction and extra strong rims make these pans excellent for carrying heavy loads. Rounded corners make cleaning easy.

### details

- Pans are tapered for nesting to save space
- Rolled edges provide extra stiffness for carrying heavy contents
- Heavy wall construction will withstand rugged use and repeated sterilization
- Autoclavable

**Nalgene Autoclavable Pans**

Cat. No.	Capacity, L (qts.)	L x W x H, mm (in.)	No. per Pack	No. per Case
6902-1000	2 (1.8)	260 x 159 x 64 (10-1/4 x 6-1/4 x 2-1/2)	1	6
6902-2000	2.8 (2)	260 x 159 x 105 (10-1/4 x 6-1/4 x 4-1/8)	1	6
6902-3000	3.1 (3)	324 x 260 x 70 (12-3/4 x 10-1/4 x 2-3/4)	1	6
6902-5000	5 (5)	324 x 257 x 108 (12-3/4 x 10-1/8 x 4-1/4)	1	6



## ► Thermo Scientific Nalgene Pipet/Instrument Sterilizing Tray with Cover filled polypropylene



**Nalgene™ Pipet/Instrument Sterilizing Tray with rigid plastic construction cuts down on breakage and chipping of glass pipet tips.**

Horizontal design allows pipets to be fully immersed in disinfectant. Tray is stackable, lightweight, quiet and less expensive than stainless steel. Cover fits into groove of pan to minimize spillage of hazardous materials.

### details

- Holds pipets up to 40 cm long in a stackable, lightweight alternative to stainless steel
- Can also be used to sterilize small labware and instruments
- Resists aggressive disinfectants
- Cover has a hand grip and rests in a groove to minimize spillage of hazardous materials
- Autoclavable

**Compliance:** Meets OSHA Standard 29CFR1910.1030 for use as protection against bloodborne pathogens. Conforms to NIH and Federal Register guidelines for biohazardous and recombinant DNA research where disinfecting and subsequent autoclaving of pipets are required before cleaning and disposal.

### Nalgene Pipet/Instrument Sterilizing Tray with Cover

Cat. No.	Description	L x W x H, mm (in.)	No. per Pack	No. per Case
6910-0618	Sterilizing Tray	456 x 152 x 67 (18 x 6 x 2-5/8)	1	6

## ► Thermo Scientific Nalgene Pans high-density polyethylene



**Nalgene™ pans are used for soaking labware or as ice baths.**

Durable, sturdy pans have a rolled rim for extra-strength. Chemically resistant to most acids, bases and alcohols.

### details

- Rugged, durable pans tapered for nesting
- Molded-in handles and rolled edges for easy carrying and handling
- Resistant to most acids, bases and alcohols for a multitude of uses in the lab

*Notes: This pan is NOT autoclavable.*

### Nalgene Pans

Cat. No.	L x W x H, Top O.D., mm (in.)	L x W x H, Bottom I.D., mm (in.)	No. per Pack	No. per Case
7120-0010	358 x 308 x 143 (14-1/8 x 12-1/8 x 5-5/8)	254 x 221 x 135 (10 x 8-3/4 x 5-3/8)	1	6
7120-0020	541 x 435 x 130 (21-3/8 x 17-1/8 x 5-1/8)	422 x 336 x 127 (16-5/8 x 13-1/4 x 5)	1	6



## ► Thermo Scientific Nalgene Autoclaving Baskets

polypropylene



**Nalgene™ Polypropylene Autoclaving Baskets hold labware during autoclaving and washing**

Baskets provide complete venting and draining. Smooth surface will not scratch plastic or glass contents. Chemically compatible with most acids, bases and alcohols, so it won't corrode.

### details

- Provides airflow for venting and drying
- Smooth surface will not scratch plastic or glass
- Nestable for storage
- Autoclavable

### Nalgene Autoclaving Baskets

Cat. No.	L x W x H, cm (in)	No. per Pack	No. per Case
6917-0127	15.6 x 12.2 x 10.4 (6-1/8 x 4-7/8 x 4-1/8)	1	6
6917-0150	15.6 x 16.8 x 17.8 (6-1/8 x 6-5/8 x 7)	1	6
6917-0230	23.3 x 23.0 x 23.9 (9-1/4 x 9-1/8 x 9-3/8)	1	6

## ► Thermo Scientific Nalgene Pneumatic Trough

polypropylene



**Nalgene™ PP Pneumatic Trough is an excellent replacement for metal-type troughs.**

Polypropylene trough features tapered sides for nesting. Lightweight, corrosion-proof and quiet, it has no sharp corners or separate parts to lose. Built-in gas inlet and platform accommodates four 250 mL bottles.

### details

- Lightweight, corrosion-proof and quieter than metal
- No sharp corners or separate parts to lose
- Bridge supports four wide mouth 250 mL bottles
- Gas tubing passes through a loop to prevent liquid from flowing into gas line
- Liquid inlet and outlet connections accept 1/4 in. I.D. x 3/8 in. O.D. (6.4 x 9.5 mm) tubing (tubing sold separately)

### Nalgene Pneumatic Trough

Cat. No.	Description	L x W x H, cm	No. per Case
6820-0010	Pneumatic Trough	31.1 x 17.2 x 76	6



## ► Thermo Scientific Nalgene Pipet Baskets

high-density polyethylene



**Nalgene™ Pipet Baskets are made of resilient, chemical-resistant HDPE to protect glass pipets from breakage.**

Perforated screen in the bottom allows cleaning solutions to fill the chamber from the bottom and is recessed 3/4 in. (1.9 cm) for complete drainage. Use inside Nalgene pipet jars for soaking pipets in cleaning or disinfection solutions, then drain and transfer into the Nalgene pipet washer for automatic pipet washing and rinsing.

### details

- Rugged, resilient baskets cushion pipets and won't corrode
- Perforated bottom is recessed 19 mm (3/4 in.) into base for complete drainage
- Chemically compatible with most acids, bases, alcohols and detergents

*Notes: Match size letter code for best jar and washer fits.*

### Nalgene Pipet Baskets

Cat. No.	Size Code	Height with Handle, cm (in.)	For Pipet Length, cm (in.)	No. per Case
DS5241-0020	A	37 (14-3/4)	20.3 (8)	1
DS5241-0040	B	58 (22-3/4)	40.6 (16)	1
DS5241-0050	C	78 (30-3/4)	61.0 (24)	1

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## ► Thermo Scientific Nalgene Pipet Jars

cross-linked high-density polyethylene, polypropylene copolymer base



**Nalgene™ Pipet Jars are used for soaking or chemically sterilizing glass pipets.**

Tough, rigid and seamless jar is ideal for soaking glassware and pipets. Excellent general purpose container with dust lid.

### details

- Cross-linked high-density polyethylene is chemically compatible for long-term exposure to most acids, bases, alcohols and detergents
- May be used with sulfuric acid/dichromate solution if acid concentration is 60% or less
- Recommended cleaning solution formula shown on the jar's label is effective and lasts longer than standard solutions
- Match size letter code with basket size letter code for optimum fit
- Base with flanges prevents tipping

**Storage:** Store jar in container, sink or drainboard large enough to retain contents should leakage occur.

**Caution:** Not for use with concentrated sulfuric acid. Do not mix cleaning solutions in jar; see jar label for recommended solution formula

**How to use:** Fill with preferred cleaning solution. Place pipets in the corresponding Nalgene pipet basket (Cat. No. DS5241) for easy submersion in, and retrieval from, the jar. Lid slows cleaning solution evaporation and keeps contents free from debris. Flanged base for added security.

### Nalgene Pipet Jars

Cat. No.	Size	For Pipets up to, cm (in.)	H x D, cm (in.)	No. per Pack	No. per Case
5242-0040	A	20.3 (8)	51.4 x 16.5 (20-1/4 x 6-1/2)	1	6
5242-0050	B	40.6 (16)	68.6 x 16.5 (27 x 6-1/2)	1	6
5242-0060	C	61 (24)	91.4 x 17.5 (36 x 6-7/8)	1	2



## ► Thermo Scientific Nalgene Pipet Washers/Rinsers

high-density polyethylene



**Nalgene™ Pipet Washer/Rinsers attach to your sink water or DI tap and drain for repeated, automatic fill and empty cycling.**

### details

- One piece, leakproof, weld-free
- High-density polyethylene is built for rugged use
- Large tubing diameter permits faster cycles and allows water to drain completely
- Water inlet designed to eliminate back siphoning of contaminated water into water line, even if pressure drops
- Slower cycling is achieved without attachments by turning down water source flow rate
- Works well on low water pressure

**Includes:** Clear plastic tubing for inlet and outlet. Pipet basket sold separately.

**How to use:** Attach to water inlet and direct drain tubing into an appropriate drain to accept the rinse water. Turn on your water source and the wash chamber fills from the water inlet. When wash chamber is full, a siphon forms at the drain elbow emptying the chamber through the drain outlet. Fill and empty cycles continue until water source is turned off.

### Nalgene Pipet Washers/Rinsers

Cat. No.	Size	For Pipets up to, cm (in.)	Overall H, cm (in.)	No. per Pack	No. per Case
5245-0040	A, B	41 (16)	78 (30-1/2)	1	6
5245-0050	C	61 (24)	97 (38)	1	4

## ► Thermo Scientific Nalgene Pipet Cleaning Equipment Sets



**Nalgene™ Pipet Cleaning Equipment Sets include everything needed to clean pipets.**

Each of these packaged sets comes with a basket, jar and washer. Convenient larger size available in this set package to accommodate up to 32 in. (81 cm) long pipets.

### details

- All are made of rugged, high-density polyethylene
- Components are also available separately except F size (sold only as a set)

**Includes:** One pipet jar, one basket and one washer/rinser of size indicated.

*Notes: For horizontal pipet washing, see Cat. No. 6910-0618: Instrument/pipet sterilizing pan.*

### Nalgene Pipet Cleaning Equipment Sets

Cat. No.	Size	For Pipets up to, cm (in.)	No. per Case
5250-0040	B	41 (16)	1
5250-0050	C	61 (24)	1
DS5250-0060	F	81 (36)	1



## ► Thermo Scientific Nalgene Unwire Test Tube Racks

Resmer™ Manufacturing Technology



**Nalgene™ Unwire™ Test Tube Racks withstand most lab chemicals and temperatures up to 121°C.**

Sturdy, durable plastic racks have no coating to chip, peel or rust. These racks are molded in a single piece for exceptional strength and durability. Securely hold a full load of test tubes or centrifuge tubes for 13, 16, 20, 25 and 30 mm diameter sizes. Molded in 6 bright and long-lasting colors to help keep your samples organized.

### details

- Smooth finish leaves fewer places for contaminants to lodge; no welds to break, no sharp edges and no assembly required – ready to use
- Endplates accept large labels for easy identification of samples
- Higher specific gravity than water so rack stays submerged in a water bath – won't float
- Withstands most lab chemicals and temperatures up to 121°C for a variety of lab procedures
- Available in six bright colors to help keep samples organized
- 15 mL conical tubes fit 20 mm racks; 50 mL conical tubes fit 30 mm racks
- Autoclavable

### Nalgene Unwire Test Tube Racks

Cat. No.	Array	Color	L x W x H, cm (in.)	No. per Pack	No. per Case
<b>For 13 mm tubes, 72 places</b>					
5970-0513	6 x 12	Red	20 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5970-0313	6 x 12	Blue	20 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5970-0413	6 x 12	Green	20 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5970-0213	6 x 12	Yellow	20 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5970-0113	6 x 12	Orange	20 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5970-0013	6 x 12	White	20 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
<b>For 16 mm tubes, 72 places</b>					
5970-0516	6 x 12	Red	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5970-0316	6 x 12	Blue	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5970-0416	6 x 12	Green	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5970-0216	6 x 12	Yellow	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5970-0116	6 x 12	Orange	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5970-0016	6 x 12	White	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
<b>For 20 mm tubes, 40 places</b>					
5970-0520	4 x 10	Red	25 x 10.2 x 8.3 (9-3/4 x 4 x 3-1/4)	1	8
5970-0320	4 x 10	Blue	25 x 10.2 x 8.3 (9-3/4 x 4 x 3-1/4)	1	8
5970-0420	4 x 10	Green	25 x 10.2 x 8.3 (9-3/4 x 4 x 3-1/4)	1	8
5970-0220	4 x 10	Yellow	25 x 10.2 x 8.3 (9-3/4 x 4 x 3-1/4)	1	8
5970-0120	4 x 10	Orange	25 x 10.2 x 8.3 (9-3/4 x 4 x 3-1/4)	1	8
5970-0020	4 x 10	White	25 x 10.2 x 8.3 (9-3/4 x 4 x 3-1/4)	1	8



## ► Thermo Scientific Nalgene Unwire Test Tube Racks

### Resmer™ Manufacturing Technology, continued

#### Nalgene Unwire Test Tube Racks

Cat. No.	Array	Color	L x W x H, cm (in.)	No. per Pack	No. per Case
<b>For 25 mm tubes, 40 places</b>					
5970-0525	4 x 10	Red	30 x 12.1 x 9.2 (11-3/4 x 4-3/4 x 3-1/2)	1	8
5970-0325	4 x 10	Blue	30 x 12.1 x 9.2 (11-3/4 x 4-3/4 x 3-1/2)	1	8
5970-0425	4 x 10	Green	30 x 12.1 x 9.2 (11-3/4 x 4-3/4 x 3-1/2)	1	8
5970-0225	4 x 10	Yellow	30 x 12.1 x 9.2 (11-3/4 x 4-3/4 x 3-1/2)	1	8
5970-0125	4 x 10	Orange	30 x 12.1 x 9.2 (11-3/4 x 4-3/4 x 3-1/2)	1	8
5970-0025	4 x 10	White	30 x 12.1 x 9.2 (11-3/4 x 4-3/4 x 3-1/2)	1	8
<b>For 30 mm tubes, 24 places</b>					
5970-0530	3 x 8	Red	28.3 x 10.8 x 8.3 (11-1/4 x 4-1/4 x 3-1/4)	1	8
5970-0330	3 x 8	Blue	28.3 x 10.8 x 8.3 (11-1/4 x 4-1/4 x 3-1/4)	1	8
5970-0430	3 x 8	Green	28.3 x 10.8 x 8.3 (11-1/4 x 4-1/4 x 3-1/4)	1	8
5970-0230	3 x 8	Yellow	28.3 x 10.8 x 8.3 (11-1/4 x 4-1/4 x 3-1/4)	1	8
5970-0130	3 x 8	Orange	28.3 x 10.8 x 8.3 (11-1/4 x 4-1/4 x 3-1/4)	1	8
5970-0030	3 x 8	White	28.3 x 10.8 x 8.3 (11-1/4 x 4-1/4 x 3-1/4)	1	8



## ► Thermo Scientific Nalgene Unwire Half-Racks

### Resmer™ Manufacturing Technology



**Nalgene™ Unwire™ Half-Racks are ideal for use in incubators, refrigerators, freezers, under lab hoods, and on benchtops.**

Our half-racks have all the features of our full sized Unwire racks, but occupy half the space! These half-racks fit easily in ice or water baths – will not float. More space-efficient than full-sized racks. Molded in 6 bright colors to help keep samples organized.

#### details

- Smooth finish leaves fewer places for contaminants to lodge; no welds to break, no sharp edges and ready to use – no assembly required
- Endplates accept large labels for easy identification of samples
- Higher specific gravity than water so stays submerged in a water bath – won't float
- Withstands most lab chemicals and temperatures up to 121°C for a variety of lab procedures
- Available in six bright colors to help keep samples organized
- 15 mL conical tubes fit 20 mm racks; 50 mL conical tubes fit 30 mm racks
- Half the length of standard Unwire Racks, racks save space on the benchtop or fit easily in ice or water baths
- Autoclavable

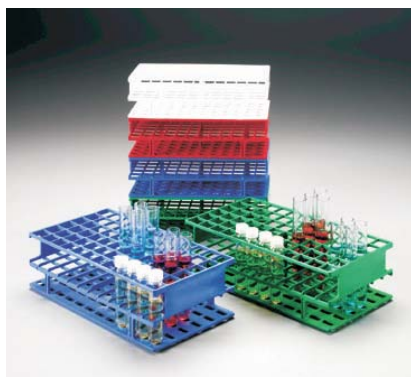
#### Nalgene Unwire Half-Racks

Cat. No.	Array	Color	L x W x H, cm (in.)	No. per Pack	No. per Case
<b>For 13 mm tubes, 36 places</b>					
5972-0013	6 x 6	White	10.2 x 10.2 x 5.6 (4 x 4 x 2-1/4)	1	8
5972-0313	6 x 6	Blue	10.2 x 10.2 x 5.6 (4 x 4 x 2-1/4)	1	8
5972-0413	6 x 6	Green	10.2 x 10.2 x 5.6 (4 x 4 x 2-1/4)	1	8
5972-0513	6 x 6	Red	10.2 x 10.2 x 5.6 (4 x 4 x 2-1/4)	1	8
<b>For 16 mm tubes, 36 places</b>					
5972-0016	6 x 6	White	12.7 x 12.7 x 6.8 (5 x 5 x 2-3/4)	1	8
5972-0316	6 x 6	Blue	12.7 x 12.7 x 6.8 (5 x 5 x 2-3/4)	1	8
5972-0416	6 x 6	Green	12.7 x 12.7 x 6.8 (5 x 5 x 2-3/4)	1	8
5972-0516	6 x 6	Red	12.7 x 12.7 x 6.8 (5 x 5 x 2-3/4)	1	8
<b>For 20 mm tubes, 20 places</b>					
5972-0020	4 x 5	White	12.7 x 10.5 x 8.4 (5 x 4 x 3-1/4)	1	8
5972-0320	4 x 5	Blue	12.7 x 10.5 x 8.4 (5 x 4 x 3-1/4)	1	8
5972-0420	4 x 5	Green	12.7 x 10.5 x 8.4 (5 x 4 x 3-1/4)	1	8
5972-0520	4 x 5	Red	12.7 x 10.5 x 8.4 (5 x 4 x 3-1/4)	1	8
<b>For 25 mm tubes, 16 places</b>					
5972-0025	4 x 4	White	12.2 x 12.2 x 7.6 (5 x 4-3/4 x 3)	1	8
5972-0325	4 x 4	Blue	12.2 x 12.2 x 7.6 (5 x 4-3/4 x 3)	1	8
<b>For 30 mm tubes, 9 places</b>					
5972-0030	3 x 3	White	10.9 x 10.9 x 8.4 (4-1/4 x 4-1/4 x 3-1/4)	1	8
5972-0330	3 x 3	Blue	10.9 x 10.9 x 8.4 (4-1/4 x 4-1/4 x 3-1/4)	1	8
5972-0430	3 x 3	Green	10.9 x 10.9 x 8.4 (4-1/4 x 4-1/4 x 3-1/4)	1	8
5972-0530	3 x 3	Red	10.9 x 10.9 x 8.4 (4-1/4 x 4-1/4 x 3-1/4)	1	8



## ► Thermo Scientific Nalgene Unwire Test Tube Racks

polypropylene



**Nalgene™ Unwire™ PP Test Tube Racks provide exceptional strength and durability.**

These ready-to-use racks are designed to save space on your benchtop – they hold a full load of test tubes or centrifuge tubes. Available in four bright colors, its easy to keep samples organized.

### details

- Higher specific gravity than water so rack stays submerged in a water bath – won't float
- Hold a full load of test tubes or centrifuge tubes for 13, 16, 20, 25 and 30 mm sizes or up to 72 smaller diameter tubes
- Four bright colors help keep samples organized
- Endplates accept large labels for easy identification of samples

*Notes: These racks are NOT autoclavable.*

### Nalgene Unwire Test Tube Racks

Cat. No.	Array	Color	L x W x H, cm (in.)	No. per Pack	No. per Case
<b>For 13 mm tubes, 72 places</b>					
5976-0013	6 x 12	White	20.0 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5976-0313	6 x 12	Blue	20.0 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5976-0413	6 x 12	Green	20.0 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
5976-0513	6 x 12	Red	20.0 x 10.2 x 5.7 (7-3/4 x 4 x 2-1/4)	1	8
<b>For 16 mm tubes, 72 places</b>					
5976-0016	6 x 12	White	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5976-0316	6 x 12	Blue	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5976-0416	6 x 12	Green	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8
5976-0516	6 x 12	Red	24.8 x 12.7 x 7.0 (9-3/4 x 5 x 2-3/4)	1	8

## ► Thermo Scientific Nalgene Test Tube Racks, General Purpose polycarbonate



**Nalgene™ PC General-Purpose Racks are available with handles for easy carrying.**

These general purpose racks can stack with any other racks of the same length when empty. Holes are keyed with molded-in numbers and letters for easy identification of tubes.

### details

- Identify tubes easily with keyed in numbers and letters on rack
- Handles make these racks easy to carry
- Will stack with other racks of same length to save space when not in use
- Higher specific gravity than water so racks stay submerged in a water bath – won't float
- Autoclavable

*Notes: Autoclaving will reduce strength over time.*

**Nalgene Test Tube Racks, General Purpose**

Cat. No.	For Tube Size	Array	L x W, cm (in.)	No. of Places	No. per Pack	No. per Case
5929-0016	13–16 mm	4 x 10	28.5 x 11.5 (11 x 4-1/2)	40	1	4
5929-0020	16–20 mm	4 x 10	28.5 x 11.5 (11 x 4-1/2)	40	1	4
5929-0030	25–30 mm	3 x 8	32.0 x 11.5 (12-1/2 x 4-1/2)	24	1	4

## ► Thermo Scientific Nalgene Test Tube Racks, General Purpose polypropylene



**Nalgene™ PP General Purpose Racks are available with handles for easy carrying.**

These general purpose racks can stack with any other racks of the same length when empty. Holes are keyed with molded-in numbers and letters for easy identification of tubes.

### details

- Identify tubes easily with keyed in numbers and letters on rack
- Handles make these racks easy to carry
- Will stack with other racks of same length to save space when not in use
- Superior chemical resistance make these racks compatible with many chemicals in the lab
- Higher specific gravity than water so stays submerged in a water bath – won't float

*Notes: These racks are NOT autoclavable.*

**Nalgene Test Tube Racks, General Purpose**

Cat. No.	For Tube Size	Array	L x W, cm (in.)	No. of Places	No. per Pack	No. per Case
5930-0013	10–13 mm	6 x 12	28.5 x 11.5 (11 x 4-1/2)	72	1	4
5930-0016	13–16 mm	4 x 10	28.5 x 11.5 (11 x 4-1/2)	40	1	4
5930-0020	16–20 mm	4 x 10	28.5 x 11.5 (11 x 4-1/2)	40	1	4
5930-0030	21–25 mm	3 x 8	32.0 x 11.5 (12-1/2 x 4-1/2)	24	1	4



## ► Thermo Scientific Nalgene Test Tube Slant Racks

polycarbonate



**Nalgene™ Test Tube Slant Racks are useful for incubating liquid cultures on a slant.**

Unique end plate design on this slant rack rests at a 5° or 20° tilt to allow media to harden at an angle for incubating liquid cultures. Keyed with numbers and letters for easy identification of tube location.

### details

- After microwaving, set rack of tubes filled with media at either 5° or 20° slant
- Media will harden with a consistent slant
- Keyed with numbers and letters for identification
- Stackable when empty to save space on your benchtop
- Higher specific gravity than water so stays submerged in a water bath – won't float
- Autoclavable

*Notes: Autoclaving will reduce strength over time.*

### Nalgene Test Tube Slant Racks

Cat. No.	Description	Array	L x W, cm (in.)	Width of End Plates, cm (in.)	No. per Pack	No. per Case
5935-0016	For 15-16 mm tubes	4 x 10	28.5 x 11.5 (11 x 4-1/2)	15.5 (6)	1	4
5935-0020	For 20 mm tubes	4 x 10	28.5 x 11.5 (11 x 4-1/2)	15.5 (6)	1	4



## ► Thermo Scientific Nalgene Test Tube Peg Racks

filled polypropylene



**Nalgene™ Test Tube Peg Racks are ideal for holding sample collection tubes, reaction tubes and similar diameter test tubes.**

This rack is also suitable for drying glass plates used in electrophoresis and chromatography. Racks exhibit good chemical resistance and are autoclavable.

### details

- Consist of an array of pegs spaced to hold given-diameter test tubes while allowing full view of the tube contents
- Pegs also hold tubes in inverted position for drying
- Ribs keep inverted tubes off base to allow drainage through holes and minimize collection of airborne contaminants inside the tubes
- Suitable for drying glass plates are used in electrophoresis and chromatography
- Higher specific gravity than water so stays submerged in a water bath – won't float
- Autoclavable

#### Nalgene Test Tube Peg Racks

Cat. No.	Array	Color	L x W x H, cm (in.)	No. per Pack	No. per Case
<b>For 10 to 13 mm tubes; 96 places</b>					
5977-0013	8 x 12	White	17.9 x 12.7 x 6.4 (7 x 5 x 2-1/2)	2	8
5977-0313	8 x 12	Blue	17.9 x 12.7 x 6.4 (7 x 5 x 2-1/2)	2	8
<b>For 14 to 17 mm tubes; 50 places</b>					
5977-0017	5 x 10	White	18.7 x 10.5 x 7.0 (7-3/8 x 4-1/8 x 2-3/4)	2	8
5977-0317	5 x 10	Blue	18.7 x 10.5 x 7.0 (7-3/8 x 4-1/8 x 2-3/4)	2	8

## ► Thermo Scientific Nalgene Microcentrifuge Tube Rack

ResMer™ Manufacturing Technology



**Nalgene™ Microcentrifuge Tube Racks retain their performance in harsh lab environments.**

These racks are useful in a wide temperature range and exhibit good chemical resistance for versatility in the lab. Racks are stackable when filled with tubes, or when empty.

### details

- Keyed with molded-in letters and numbers for easy sample identification
- 4 x 6 array
- Stackable when empty or full to save space on benchtop
- Useful in a wide temperature range up to 121°C
- Exhibits good chemical resistance for long life in the lab
- Autoclavable

#### Nalgene Microcentrifuge Tube Rack

Cat. No.	Tube Cap, mL	Array	Color	L x W x H, mm	No. per Pack	No. per Case
5973-0015	1.5	4 x 6	White	143 x 90 x 52	1	8



## ► Thermo Scientific Nalgene Floating Microtube Racks polypropylene



**Nalgene™ Polypropylene Floating Microtube Racks are ideal for genetic cloning, microbiology and immunology labs.**

This rack offers excellent temperature resistance from -70° to +100°C, allowing you to thaw, cool and incubate samples at either elevated or reduced temperatures.

### details

- Square- and round-style racks for incubating 1.0 to 2.0 mL microcentrifuge tubes
- Round-style racks fit conveniently inside 400 or 1000 mL beakers
- Square-rack is designed for stable flotation in turbulent water baths
- Racks will float with a full load of filled tubes
- On benchtop, rack legs prevent bottom of tubes from touching bench surface and rack lip supports tube
- Handle provides convenient transport, agitation and removal from water bath
- Thaw, cool and incubate samples at elevated or reduced temperatures – tolerates a wide temperature range
- Each hole has molded-in letters and numbers for easy sample identification

*Notes: Racks are NOT autoclavable.*

### Nalgene Floating Microtube Racks

Cat. No.	For Tube Size, mL	Fit Nalgene Beakers, mL	Dimensions, L x W x H, mm	Array	No. per Pack	No. per Case
<b>Square Racks</b>						
5974-0404	1.0, 1.2, 1.5 and 2.0	—	103 x 103 x 65	4 x 4	4	16
<b>Round Racks</b>			<b>Dia., mm</b>			
5974-1015	1.0, 1.2, 1.5 and 2.0	1000	96	20	4	16
5974-4015	1.0, 1.2, 1.5 and 2.0	400	66	8	4	16

## ► Thermo Scientific Nalgene Safety Bottle Carriers

low-density polyethylene, polycarbonate cap, epoxy-coated handle



**Nalgene™ Safety Bottle Carriers safely and easily hold 2.5 L and 4 L chemical bottles, with or without finger loops.**

Holds and protects standard acid and chemical bottles and permits pouring without removing the bottles. Cover locks in place with epoxy-coated handle while carrying. Clear cap protects bottle closure and allows identification of color-coded closure on acid bottles. Cap twists for removal from cover, so no need to remove bottle from carrier to pour.

### details

- Epoxy-coated handle locks in place while carrying contents
- Clear cap allows identification of color-coded closure on acid bottles and protects bottle closure
- Cap twists for removal from cover – no need to remove bottle from carrier to pour
- Cushions glass bottles from breakage
- Cover locks in place to ensure safe transportation of contents

### Nalgene Safety Bottle Carriers

Cat. No.	Capacity, L	No. per Pack	No. per Case
6501-2500	2.5	1	6
6501-4000	4	1	6



## ► Thermo Scientific Nalgene Safety Half-Liter Bottle Carriers

linear low-density polyethylene



**Nalgene™ Safety Bottle Carrier holds up to six standard 500 mL reagent bottles in any profile.**

Bottles are held securely in place, reducing the chances of bumping into each other, cracking or chipping. Sturdy, wide handle molded in one piece with the base allows a comfortable grip – even when carrier is full. Cover latches securely to base and allow carriers to stack.

### details

- Bottles are held securely in place, reducing the chances of bumping, cracking or chipping
- Sturdy, wide handle molded in one piece with the base allows a comfortable grip
- Cover latches securely to base and allow carriers to stack
- Linear LDPE provides rigidity and impact resistance

#### Nalgene Safety Half-Liter Bottle Carrier

Cat. No.	Description	L x W x H, mm (in.)	No. per Pack	No. per Case
6505-0010	500 mL Bottle Carriers	349 x 248 x 276 (14 x 10 x 11)	1	6

## ► Thermo Scientific Nalgene 4-in-1 EZ Tote Bottle Carrier

blue corrugated plastic



**Nalgene™ 4-in-1 EZ Tote™ Bottle Carrier holds eight 500 mL, six 1 L, or two 4 L bottles. Manufactured from 3 mm corrugated HDPE plastic.**

Carrier makes transporting bottles and other lab essentials safer and easier. Versatile, durable and lightweight, partitions are included and assembly instructions are printed on each tote.

### details

- Reconfigurable partitions make this a versatile tote
- Holds up to 28 lb. (12.7 kg)
- Stores flat and easy to assemble

*Notes: Carrier is not autoclavable.*

#### Nalgene 4-in-1 EZ Tote Bottle Carrier

Cat. No.	For Bottle Size, L	L x W x H, cm (in.)	No. of Positions	No. per Case
6565-0001	.5, 1, or 4	33 x 20 x 34 (13 x 8 x 13-1/2)	Reconfigurable partitions	4



## ► Thermo Scientific Nalgene Multi-Bottle Rack

white polycarbonate



**Nalgene™ Multi-Bottle Rack holds up to eight 500 mL round or square bottles securely.**

Bottles fit snugly between upper grid and molded-in depressions on lower tray and protect against bumping while being transported. Handle telescopes for convenient storage. Also useful as a BOD bottle rack.

### details

- Handle telescopes into rack for convenient storage
- Bottles fit securely in upper grid and molded-in depressions for safe carrying
- Autoclavable

#### Nalgene Multi-Bottle Rack

Cat. No.	For Bottle Size, mL	Dimensions w/ Handle extended, cm	Height w/ Handle telescoped, cm	Bottles Held	No. per Case
DS5996-0871	500	33.0 x 19.4 x 22.9	16.5	8	1



## ► Thermo Scientific Nalgene Benchtop Beta Radiation Shield acrylic



**Nalgene™ Benchtop Beta Radiation Shields are designed for use on the laboratory benchtop during procedures which require the handling of  $\beta$ -emitting isotopes.**

Nalgene Benchtop Beta Radiation Shields are transparent and free-standing with an angled top that allows contents of tubes located behind the shield to be viewed from the top while the shield protects the lab worker.

### details

- Designed to protect the lab worker during laboratory benchtop procedures which require the handling of  $\beta$ -emitting isotopes
- Made of 3/8 in. thick acrylic – stops  $\beta$ -emitting radioactive isotopes
- Transparent with an angled top that allows contents of tubes located behind the shield to be viewed from the top
- The 12 in. deep base provides a large flat work surface and minimizes the risk of “hot spots” on the benchtop
- Radiation/Transparent

**Includes:** Radiation labels.

**Compliance:** Both shields meet OSHA Standard 29CFR Part 1910.1030 for use as protection against bloodborne pathogens.

**WARNING!** Radioactive waste should never be stored on the benchtop for long periods of time and should be disposed of properly. Proper handling and storage of isotopes will minimize exposure to radiation. For standards related to exposure, refer to United States Nuclear Regulatory Commission Rules and Regulations, Title 10, Chapter 1, Part 20.

### Nalgene Benchtop Beta Radiation Shield

Cat. No.	I.D., H x W x D, mm (in.)	Thickness, mm (in.)	No. per Case
6700-1812	457 x 305 x 305 (18 x 12 x 12)	9 (3/8)	1
6700-2418	610 x 457 x 305 (24 x 18 x 12)	9 (3/8)	1





## ► Thermo Scientific Nalgene Beta Waste Container (with bottle)

acrylic, polyethylene bottle



**Nalgene™ Beta Waste Container for the benchtop is constructed of 3/8 in. thick (0.95 cm) acrylic, protecting personnel from waste material containing beta-emitting isotopes.**

Transparent shield encases the waste bottle without obstructing access to or manipulation of bottle closure.

Provided with a 2-liter HDPE Nalgene wide mouth waste bottle for holding liquid wastes. Machined lip on the cap prevents slipping and provides extra impact protection.

### details

- Shield cap fits securely over waste bottle – machined lip on cap prevents slipping and provides extra impact protection
- Shield encases 2 L (64 oz.) Nalgene waste bottles (included) while providing safe access to, or easy manipulation of, bottle closure
- Radiation/Transparent

**Ordering Information:** Additional replacement bottles may be purchased (Cat. No. 2120-0005). Other Nalgene bottles may also be used as replacement bottles including Cat. Nos. 2125-2000 and 2115-2000.

**Includes:** Nalgene 2 L HDPE bottle.

### Nalgene Beta Waste Container (with bottle)

Cat. No.	Capacity, L (oz.)	Dia. x H, cm (in.)	No. per Case
6710-2000	2 (64)	14.0 x 28.6 (11-1/4 x 5-1/2)	1



## ► Thermo Scientific Nalgene Beta Waste Containers acrylic



**Nalgene™ Beta Waste Containers stop beta-emitting radioactive isotopes to protect lab workers.**

Completely enclose a large container holding solid or liquid radioactive waste. in this 3/8 in. (9 mm) thick collapsible acrylic beta waste container. Large hinged door on cover and hinged corners on sides allow for easy access to waste container. The leakproof tray contains spills.

### details

- Made of 3/8 in. (9 mm) thick acrylic – stops beta-emitting radioactive isotopes
- Transparent for easily viewing contents
- Can enclose a large container holding solid or liquid beta-radioactive waste
- Large hinged door on cover for easy access to waste container
- Hinged corners for removing container
- Leakproof tray contains spills, protecting the lab worker
- Large size accommodates a 20 L Nalgene carboy and standard office-sized trash cans
- Small size accommodates a 10 L Nalgene carboy
- Radiation/Transparent

**WARNING!** Radioactive waste should never be stored on the benchtop for long periods of time and should be disposed of properly. Proper handling and storage of isotopes will minimize exposure to radiation. For standards related to exposure, refer to United States Nuclear Regulatory Commission Rules and Regulations, Title 10, Chapter 1, Part 20.

### Nalgene Beta Waste Containers

Cat. No.	Material	I.D., D x W x H, cm (in.)	O.D., D x W x H, cm (in.)	Thickness, mm (in.)	No. per Case
6745-0010	Acrylic	28.6 x 28.6 x 40.6 (11-1/4 x 11-1/4 x 16)	33.0 x 33.0 x 43.2 (13 x 13 x 17)	9 (3/8)	1
6745-9024	Acrylic	40.6 x 40.6 x 73.6 (16 x 16 x 29)	45.7 x 45.7 x 73.7 (18 x 18 x 29-3/8)	9 (3/8)	1

## ► Thermo Scientific Nalgene Safety Splash Shield

polycarbonate, acetal flexible arm; magnetic base



**Nalgene™ Safety Splash Shield protects the user while simultaneously providing a clear field of vision.**

Attaches easily to benchtop shelving, machinery or other magnetic surfaces for convenient protection from splashes, aerosols and flying debris. The flexible arm is easy to maneuver and adjust without getting in the way so that you can comfortably work behind or beneath the protective shield with a clear view.

### details

- Protects user while providing a clear field of vision through durable, scratch-resistant 1/8 in. (3 mm) transparent polycarbonate
- Flexible 14 in. arm makes maneuvering shield over samples easy
- Magnetic base firmly grips to magnetic surfaces letting you position the shield horizontally (flat), vertically or on an overhead surface
- Provides UV protection from 200-360 nm for added versatility
- Biohazard/Transparent

**Compliance:** Meets OSHA 29CFR1910.1030 standard

**Warning:** Do not use with radioisotopes. Use Nalgene beta-radiation shields when working with beta-radioisotopes. Do not autoclave.

### Nalgene Safety Splash Shield

Cat. No.	Description	L x W, cm (in.)	No. per Pack	No. per Case
6356-0001	Safety Splash Shield	28.0 x 21.5 (12 x 8-1/2)	1	4



## ► Thermo Scientific Nalgene Faceshield

polycarbonate, polyethylene headdress



**Nalgene™ Faceshield is adjustable and has an optically-clear window that provides impact protection and can be comfortably worn over safety glasses.**

This wraparound shield provides protection to your head and neck from exposure to UV light rays. It is useful in germicidal procedures, reading of chromatographic/electrophoretic strips and gels.

### details

- Adjustable, one-piece faceshield made of optically-clear 1/16 in. thick (0.15 cm) polycarbonate
- Wraparound design offers both front and side protection while height provides coverage from the bottom of the neck to the top of the head
- Features a comfortable and adjustable polyethylene headdress
- UV protection from 200 to 360 nm (UV radiation may cause the polycarbonate to develop a slight yellow/brown tint)
- Biohazard/Transparent

**Compliance:** Complies with OSHA 29CFR1910.1030 and ANSI Z87.1-1989 standards for use with bloodborne pathogens.

**Warning:** Do not use with radioisotopes. Use Nalgene beta-radiation shields when working with beta-radioisotopes. Do not autoclave.

### Nalgene Faceshield

Cat. No.	Lens Tint	Lens Material	L x W, cm	No. per Pack	No. per Case
6355-0001	Clear	Polycarbonate	29,5 x 20	1	4



## ► Thermo Scientific Nalgene Staining Boxes

polymethylpentene box, polypropylene copolymer cover, low-density polyethylene plug



**Nalgene™ Staining Boxes allow you to stain, fix, destain and handle fragile electrophoresis gels and membranes with little chance of damage.**

Covered boxes hold most common size gels along with 500 to 750 mL of liquid.

Stain, fix, destain and handle electrophoresis gels and membranes with less chance of damage than conventional methods. Equipped with a bottom drain for solution changes without disturbing the box's other fragile contents.

### details

- Useful in a wide temperature range: -70° to +70°C
- Good chemical resistance to acids, bases and select organic solvents for a versatile range of protocols
- Plug in bottom allows easy drainage of liquid with minimal handling of gel and provides a leakproof seal; won't interfere with cover or contents on a benchtop shaker
- Boxes are stackable and have a handle on each end for safe, easy carrying
- Microwavable and easy to clean
- Replacement plug available

### Nalgene Staining Boxes

Cat. No.	Inside L x W, cm (in.)	No. per pkg	No. per Case
5705-1010	12.5 x 12.5 (5 x 5)	1	2
5705-2020	22.5 x 22.5 (9 x 9)	1	2
715705-0001	Replacement plug for staining boxes 5705-1010 and 2020	12	12



## ► Thermo Scientific Nalgene Suspended Magnetic Stir Bars

Alnico V magnet encapsulated in Teflon® TFE, Tefzel™ ETFE bracket



**Nalgene™ Suspended Magnetic Stir Bars are designed for constant low-speed stirring action in tissue culture applications.**

Magnetic stir bars are ideal for tissue culture applications. The bar is slightly raised off the bottom surface of the vessel to minimize grinding effect on cells. Legs can be compressed to fit through small openings.

### details

- Legs can be compressed to fit through 1.5 in. (38 mm) openings
- Stir bar is slightly raised off the bottom surface of the vessel to minimize grinding effect on cells
- Consistent action at low speeds
- Excellent resistance to chemicals and temperatures up to 150°C
- Autoclavable/TFE

**Ordering Information:** Disassemble for cleaning.

*Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.*

### Nalgene Suspended Magnetic Stir Bars

Cat. No.	Dia x H, mm (in.)	For Beaker, mL	No. per Pack	No. per Case
DS6630-0250	54 x 28 (2-1/8 x 1-1/8)	250	1	1
DS6630-1000	92 x 30 (3-5/8 x 1-3/16)	1000	1	2
DS6630-4000	155 x 31 (6-1/8 x 1-1/4)	4000	1	2

## ► Thermo Scientific Nalgene Stirring Rod

white polypropylene



**Nalgene™ stirring rods combine functions of a stirring rod and rubber policeman with a flat paddle at one end and a triangular paddle at the other end.**

Chemically compatible with a wide range of lab reagents.

### details

- Flat paddle, 1.6 x 1.6 cm (5/8 x 5/8 in.) at one end; triangular paddle at the other end
- Provides the functionality of both a stir rod and a rubber policeman in one convenient tool
- Overall length is 24.8 cm (9-3/4 in.), making it a convenient and conventional length for a wide variety of lab uses
- Suitable for heated applications over a wide range of temperatures (0°C to 135°C)
- Autoclavable

### Nalgene Stirring Rod

Cat. No.	Length, mm (in.)	No. per Pack	No. per Case
6169-0010	248 (9-3/4)	12	72



## ► Thermo Scientific Nalgene 180 Clear Plastic Tubing

polyvinyl chloride



**Nalgene™ 180 Clear PVC Tubing is manufactured from the highest-grade resins and special plasticizers, and is available in 50, 100, 250 and 500 ft. cases.**

PVC tubing resists hardening, discoloration, and a wide range of chemicals.

### details

- Lab-grade, autoclavable clear tubing sets the standard for purity and quality, made from highest-grade resins and plasticizers
- Resists hardening and discoloration and a wide range of chemicals – demonstrates dimensional stability
- Equivalent to Tygon™ R-3603 tubing
- Marked with I.D. and regulatory compliance as well as at 12 in. intervals for easy identification and measurement (except as noted below)
- Durometer hardness is Shore A, 55
- Autoclavable/Transparent

**Compliance:** Meets Food Additives Amendment of the Federal Food, Drug, and Cosmetic Act; also USDA and U.S. Pharmacopeia Class VI requirements for plastic materials.

*Disclaimer: Not intended for medical use. Nalgene 180 and 980 PVC tubing contain DEHP [Bis (2-ethylhexyl)] phthalate, a commonly used plasticizer. It is known to the state of California Environmental Agency that this chemical causes cancer or reproductive toxicity.*

### Nalgene 180 Clear Plastic Tubing

Cat. No.	I.D. x O.D. x Wall, in.	Max Press psig at 73°F; 23°C	Max Press psig at 125°F; 52°C	Length per Case, ft.
8000-0002*	1/32 x 3/32 x 1/32	60	30	50
8000-0004*	1/16 x 1/8 x 1/32	48	24	50
8000-0006*	3/32 x 5/32 x 1/32	42	21	50
8000-0010*	1/8 x 3/16 x 1/32	34	17	50
8000-9010*	1/8 x 3/16 x 1/32	34	17	250
8000-0020	1/8 x 1/4 x 1/16	50	25	50
8000-9020	1/8 x 1/4 x 1/16	50	25	250
8000-0025*	5/32 x 7/32 x 1/32	30	15	50
8000-0030	3/16 x 5/16 x 1/16	40	20	50
8000-9030	3/16 x 5/16 x 1/16	40	20	250
8000-0060	1/4 x 3/8 x 1/16	34	17	50
8000-4060	1/4 x 3/8 x 1/16	34	17	100
8000-9060	1/4 x 3/8 x 1/16	34	17	250
8000-5060	1/4 x 3/8 x 1/16	34	17	500
8000-0070	1/4 x 7/16 x 3/32	44	22	50
8000-0080	1/4 x 1/2 x 1/8	52	26	50
8000-4080	1/4 x 1/2 x 1/8	52	26	100

\*\* 5 x 10 ft. coils



## ► Thermo Scientific Nalgene 180 Clear Plastic Tubing

polyvinyl chloride, continued

Nalgene 180 Clear Plastic Tubing

Cat. No.	I.D. x O.D. x Wall, in.	Max Press psig at 73°F; 23°C	Max Press psig at 125°F; 52°C	Length per Case, ft.
8000-0090	5/16 x 7/16 x 1/16	30	15	50
8000-4090	5/16 x 7/16 x 1/16	30	15	100
8000-9090	5/16 x 7/16 x 1/16	30	15	250
8000-0100	5/16 x 1/2 x 3/32	40	20	50
8000-0110	5/16 x 9/16 x 1/8	46	23	50
8000-0120	3/8 x 1/2 x 1/16	26	13	50
8000-4120	3/8 x 1/2 x 1/16	26	13	100
8000-9120	3/8 x 1/2 x 1/16	26	13	250
8000-5120	3/8 x 1/2 x 1/16	25	13	500
8000-0130	3/8 x 9/16 x 3/32	36	18	50
8000-0140	3/8 x 5/8 x 1/8	44	22	50
8000-4140	3/8 x 5/8 x 1/8	44	22	100
8000-0160	7/16 x 5/8 x 3/32	34	17	50
8000-0180	1/2 x 5/8 x 1/16	22	11	50
8000-9180	1/2 x 5/8 x 1/16	22	11	250
8000-0190	1/2 x 11/16 x 3/32	28	14	50
8000-0200	1/2 x 3/4 x 1/8	34	17	50
8000-4200	1/2 x 3/4 x 1/8	34	17	100
8000-0260	5/8 x 7/8 x 1/8	28	14	50
8000-0310	3/4 x 1 x 1/8	26	13	50
8000-0350	1 x 1-1/4 x 1/8	22	11	50
8000-1350	1 x 1-1/4 x 1/8	22	11	50**
8000-0370	1 x 1-3/8 x 3/16	28	14	50

\*\* 5 x 10 ft. coils



For silicone tubing, **see page 63.**

For tubing fittings and connectors, **see page 69.**

## ► Thermo Scientific Nalgene 180 Clear Plastic Vacuum Tubing

polyvinyl chloride



**Nalgene™ 180 Vacuum Tubing is thick-walled PVC to withstand a full vacuum (80 mm Hg) at room temperature.**

Available in seven sizes – 50 ft. or convenient 10 ft. boxes.

### details

- Withstands a full vacuum (760 mm Hg, 29.9 in. Hg))
- Autoclavable/Transparent

**Compliance:** Material is Food-Grade and complies with USP VI and USDA regulations.

*Warning: Not intended for medical use. Nalgene 180 and 980 PVC tubing contains DEHP [Bis (2-ethylhexyl)] phthalate, a commonly used plasticizer. It is known to the state of California Environmental Agency that this chemical causes cancer or reproductive toxicity.*

**Nalgene 180 Clear Plastic Vacuum Tubing**

Cat. No.	I.D. x O.D. x Wall, in	Max Press psig at 73°F; 23°C	Max Press psig at 125°F; 52°C	Length per Case, ft.
8000-0055	3/16 x 9/16 x 3/16	62	31	50
8000-0065	1/4 x 5/8 x 3/16	56	28	50
8000-1065	1/4 x 5/8 x 3/16	56	28	10
8000-1090	5/16 x 7/16 x 1/16	30	15	50
8000-0145	3/8 x 7/8 x 1/4	54	27	50
8000-1145	3/8 x 7/8 x 1/4	54	27	10
8000-0210	1/2 x 1-1/8 x 5/16	52	26	50
8000-1210	1/2 x 1-1/8 x 5/16	52	26	10
8000-1270	5/16 x 1-3/8 x 3/8	56	28	10
8000-1325	3/4 x 1-1/2 x 3/8	46	23	10
8000-1375	1 x 2 x 1/2	46	23	10



## ► Thermo Scientific Nalgene 180 Clear Plastic Metric Tubing

polyvinyl chloride



**Nalgene™ 180 PVC Metric Tubing is manufactured from the highest-grade resins and special plasticizers, and is available in true metric sizes for a leak-tight fit with metric connections.**

This PVC metric tubing eliminates leakage due to improper sizing. Labelled and marked for easy cutting except where noted.

### details

- Lab-grade, autoclavable clear tubing sets the standard for purity and quality, made from highest-grade resins and plasticizers
- Resists hardening and discoloration and a wide range of chemicals – demonstrates dimensional stability
- Excellent for a wide variety of benchtop applications, this tubing is transparent, nontoxic and non-contaminating
- Marked with I.D. and regulatory compliance as well as at regular intervals for easy identification and measurement except where noted below
- Durometer hardness is Shore A, 55
- Autoclavable

**Ordering Information:** In packs of 25 m, 10 m for largest size.

**Compliance:** Food-grade material complies with USP VI and USDA regulations.

**Warning:** Not intended for medical use. Nalgene 180 and 980 PVC tubing contains DEHP [Bis (2-ethylhexyl)] phthalate, a commonly used plasticizer. It is known to the state of California Environmental Agency that this chemical causes cancer or reproductive toxicity.

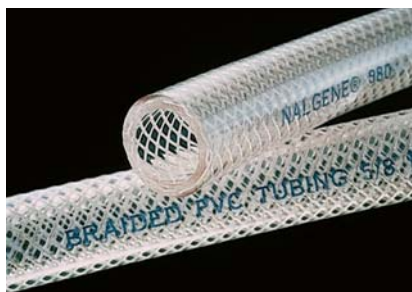
### Nalgene 180 Clear Plastic Metric Tubing

Cat. No.	I.D. x O.D. x Wall, mm	Max Press psig at 73°F; 23°C	Max Press psig at 125°F; 52°C	Length per Case, m
8001-0102*	1.0 x 2.0 x 0.5	100/690	50/345	25
8001-0204*	2.0 x 4.0 x 1.0	100/690	50/345	25
8001-0305*	3.0 x 5.0 x 1.0	80/552	40/276	25
8001-0406*	4.0 x 6.0 x 1.0	66/455	33/228	25
8001-0407	4.0 x 7.0 x 1.5	86/593	43/296	25
8001-0508	5.0 x 8.0 x 1.5	74/510	37/255	25
8001-0609	6.0 x 9.0 x 1.5	66/455	33/228	25
8001-0610	6.0 x 10.0 x 2.0	80/552	20/276	25
8001-0710	7.0 x 10.0 x 1.5	60/414	30/207	25
8001-0811	8.0 x 11.0 x 1.5	54/372	27/186	25
8001-0812	8.0 x 12.0 x 2.0	66/455	33/228	25
8001-0913	9.0 x 13.0 x 2.0	62/427	31/214	25
8001-1014	10.0 x 14.0 x 2.0	56/386	28/193	25
8001-1216	12.0 x 16.0 x 2.0	50/345	25/172	25
8001-1520	15.0 x 20.0 x 2.5	50/345	25/172	10

\* Not printed

## ► Thermo Scientific Nalgene 980 Braided Clear Tubing

polyvinyl chloride



**Nalgene™ 980 Braided Clear PVC Tubing is braided reinforced tubing designed for high-pressure applications.**

More flexible than most competitive reinforced PVC tubing, the Nalgene 980 braided tubing makes it easier to bend into place and permitting tighter compression of crimp fittings for a secure fit. Made with food-grade materials. Manufactured with strict ID tolerances. Marked with I.D. and operating pressure (blue imprinting) for easy identification and reordering.

### details

- Doesn't impart taste making it desirable for food use
- Durometer (Shore A) of 65 makes this tubing more flexible than many competitive reinforced tubings
- Added flexibility makes it easier to bend and permits tighter compression of crimp fittings
- Marked with inside diameter and maximum working pressure for easy reordering
- Designed with braided reinforcement for high-pressure applications
- Excellent for use with weak acids, weak bases and salt solutions

**Ordering Information:** In pack of 50 ft. (15.2 m).

**Compliance:** Meets FDA regulations for food use; 21 CFR for food packaging.

**Warning:** Not intended for medical use. Nalgene 180 and 980 PVC tubing contains DEHP [Bis (2-ethylhexyl)] phthalate, a commonly used plasticizer. It is known to the state of California Environmental Agency that this chemical causes cancer or reproductive toxicity.

*Notes: Not recommended for vacuum applications.*

### Nalgene 980 Braided Clear Tubing

Cat. No.	I.D. x O.D. x Wall, in.	Max. Press. psig at 73°F; 23°C	Max. Press. psig at 125°F; 52°C	Length per Case, ft.
8005-0040	3/16 x 3/8 x 3/32	276	138	50
8005-0070	1/4 x 7/16 x 3/32	276	138	50
8005-0100	5/16 x 1/2 x 3/32	276	138	50
8005-0130	3/8 x 9/16 x 3/32	250	125	50
8005-0190	1/2 x 3/4 x 1/8	230	115	50
8005-0260	5/8 x 7/8 x 1/8	230	115	50
8005-0310	3/4 x 1 x 1/8	176	88	50
8005-0360	1 x 1-5/16 x 5/32	140	70	50



## ► Thermo Scientific Nalgene 280 Tubing polyurethane



**Nalgene™ 280 Polyurethane Tubing is an ester-grade tube that is ideal for high-purity work.**

Exhibits excellent abrasion resistance, low-temperature resilience, and flex-fatigue resistance. Contains no plasticizers and low levels of extractables. Resistant to atmospheric ozone, aliphatic hydrocarbons and petroleum products. Ideal for peristaltic pump applications.

### details

- Contains no plasticizers and only low levels of extractables for high-purity applications
- Superior chemical resistance to fuels, oils, and some solvents (not recommended for aqueous solutions)
- Resistant to atmospheric ozone, aliphatic hydrocarbons and petroleum products for longer life and versatility
- Marked every 12 inches for convenient cutting
- Transparent

*Note:s Not autoclavable; can be gas sterilized.*

### Nalgene 280 Tubing

Cat. No.	I.D x O.D x Wall, in.	Max. Press. psig at 73°F; 23°C	Max. Press. psig at 125°F; 52°C	Length per Case, ft.
8030-0060	1/4 x 3/8 x 1/16	76	38	50
8030-0120	3/8 x 1/2 x 1/16	56	28	50



For silicone tubing, **see page 63.**

For tubing fittings and connectors, **see page 69.**



## ► Thermo Scientific Nalgene 489 Tubing

linear low-density polyethylene



**Nalgene™ 489 Linear Low-Density Polyethylene Tubing is highly suitable for laboratory and industrial use.**

Economically priced. Food-grade materials comply with 21 CFR 177.1520 for food packaging. Translucence allows fluid levels to be easily seen. Less flexible than Nalgene 180 tubing but can be bent to facilitate set-ups. Superior chemical resistance.

### details

- Semi-rigid tubing (Durometer 50 Shore D) is economically priced and excellent for laboratory and industrial use
- Non-toxic, odorless and tasteless, this food-grade tubing complies with 21 CFR 177.1520 for food packaging
- Tubing can be bent to facilitate set-ups and can be chemically sterilized for repeatable use
- Superior chemical resistance

**Compliance:** Complies with FDA regulations for food use.

*Notes: Does not comply with NSF Standard 51 for Food Zone Use.*

### Nalgene 489 Tubing

Cat. No.	I.D. x O.D. x Wall, in.	Max. Press. psig at 73°F; 23°C	Max. Press. psig at 145°F; 63°C	Length per Case, ft.
8010-0125	1/8 x 1/4 x 1/16	358	179	100
8010-0250	1/4 x 3/8 x 1/16	214	107	100
8010-0375	3/8 x 1/2 x 1/16	152	76	100
8010-0500	1/2 x 5/8 x 1/16	118	59	100
8010-0625	5/8 x 3/4 x 1/16	96	48	100
8010-1000	1 x 1-1/4 x 1/8	120	60	50



## ► Thermo Scientific Nalgene 689 Tubing

### polypropylene



**Nalgene™ 689 Polypropylene Tubing is translucent and semi-rigid.**

Polypropylene tubing with durometer of 75 (Shore D) exhibits excellent chemical resistance to many acids and alkalis. Unaffected by most solvents at ambient temperatures. Food-Grade materials comply with 21 CFR 177.1520 for food packaging.

#### details

- Unaffected by most solvents at ambient temperatures
- Semi-rigid Durometer 75 (shore D)
- Autoclavable

**Compliance:** Food-Grade materials comply with 21 CFR 177.1520 for food packaging.

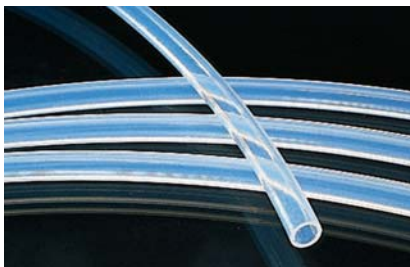
*Alert: Should not be exposed to halogenated hydrocarbons for an extended period.*

#### Nalgene 689 Tubing

Cat. No.	I.D x O.D x Wall, in.	Max. Press. psig at 73°F; 23°C	Max. Press. psig at 125°F; 52°C	Length per Case, ft.
8020-0250	3/16 x 1/4 x 1/32	110	55	100
8020-0370	1/4 x 3/8 x 1/16	272	136	100
8020-0500	3/8 x 1/2 x 1/16	194	97	100
8020-0625	1/2 x 5/8 x 1/16	450	75	100

## ► Thermo Scientific Nalgene 870 Tubing

### Teflon® PFA



**Nalgene™ Teflon® 870 PFA Tubing is tough and exhibits high chemical- and corrosion-resistance.**

Translucent tubing is excellent for low-pressure use with mechanical, compression-type fittings at room temperature. Excellent for use in a very wide temperature range (-270°C to 260°C) with low water absorption. Food-grade materials comply with 21 CFR 177.1520 for food packaging. Can be sterilized by autoclaving, gas, dry heat and disinfectants.

#### details

- Semi-rigid (60 Shore D; approximately 99 Shore A)
- Wider temperature range -270° to +260°C (-518° to +500°F)
- High level of inertness for high purity applications
- Sterilization by autoclaving, gas, dry heat and disinfectants
- Superior non-stick characteristics eases movement of viscous, aggressive liquids
- Autoclavable/PFA

**Ordering Information:** Two 25-ft. coils per case, except larger sizes.

**Compliance:** Food-grade materials comply with 21 CFR 177.1550 for food use.

*Notes: Do not sterilize by radiation. Should not be used with molten alkali metals, elemental fluorine and fluorine precursors at elevated temperatures or concentrated perchloric acid.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

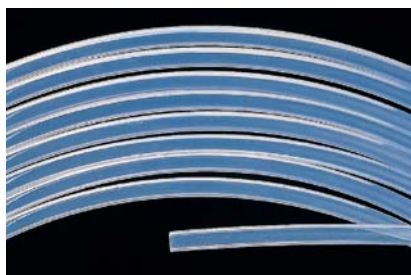
#### Nalgene 870 Tubing

Cat. No.	I.D. x O.D. x Wall, in.	Max. Press. psig at 73°F; 23°C	Max. Press. psig at 185°F; 85°C	Length per Pack, ft.	Length per Case, ft.
8051-0125	1/16 x 1/8 x 1/32	478	239	25	50
8051-0187	1/8 x 3/16 x 1/32	274	137	25	50
8051-0250	5/32 x 1/4 x 3/64	290	145	25	50
8051-0375	1/4 x 3/8 x 1/16	248	124	25	25
8051-0500	3/8 x 1/2 x 1/16	170	85	25	25



## ► Thermo Scientific Nalgene 890 Tubing

### Teflon® FEP



**Nalgene™ 890 Teflon® FEP Tubing is compatible with most known chemicals at room temperature and offers high temperature resistance.**

Translucent and semi-rigid tubing is used for demanding lab applications such as: chromatography, trace metal analysis, pollution sampling, highly reactive catalyst procedures, metallurgical corrosion testing, pharmaceutical work, dissolutions and hot acid etchings, or where binding/adsorption is a problem. Superior non-stick characteristics eases movement of viscous, aggressive compounds. Can be sterilized by autoclaving, gas, dry heat and disinfectants.

#### details

- Use for demanding lab applications where binding/adsorption is a problem
- Superior non-stick characteristics eases movement of viscous, aggressive compounds
- Can be sterilized by autoclaving, gas, dry heat and disinfectants
- Autoclavable

**Ordering Information:** Packaged in two 25-ft. (7.6 m) lengths per case.

**Compliance:** Meets FDA 21 CFR 177.1550 for food contact.

*Notes: Do not sterilize by radiation.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

#### Nalgene 890 Tubing

Cat. No.	I.D. x O.D. x Wall, in.	Max. Press. psig at 73°F; 23°C	Max. Press. psig at 185°F; 85°C	Length per Pack, ft.	Length per Case, ft.
8050-0125	1/16 x 1/8 x 1/32	440	220	25	50
8050-0187	1/8 x 3/16 x 1/32	250	125	25	50
8050-0250	3/16 x 1/4 x 1/32	140	70	25	50
8050-0310	1/4 x 5/16 x 1/32	104	52	25	50
8050-0375	5/16 x 3/8 x 1/32	84	42	25	50
8050-0437	3/8 x 7/16 x 1/32	70	35	25	50
8050-0500	7/16 x 1/2 x 1/32	60	30	25	50
8050-0562	1/2 x 9/16 x 1/32	52	26	25	50

## ► Selection Guide for Thermo Scientific Nalgene Tubing Products

Material	ASTM	180	980	890	870	50/65	280	489	689
Resin		PVC	PVC, Reinforced	FEP	PFA	Silicone, Platinum cured	PUR, Ester	LLDPE	PP
Equivalence		Tygon® R-3603	Tygon® B-44-4X I.B.						
Regulatory Compliance		USDA, Food-grade USP VI	USDA, Food-grade	USDA, Food-grade	USDA, Food-grade	USDA, Food-grade, 3-A, USP VI	N/A	USDA, Food-grade	USDA, Food-grade
Durometer (Shore)	D2240	55 (A)	65 (A)	58 (D)	60 (D)	50 (A)/65 (A)	85 (A)	50 (D)	75 (D)
Specific Gravity	D792	1.19	1.20	2.17	2.15	1.15	1.18	0.92	0.90
Operating Temp Range (°F)	D789	-25 to 160	-5 to 180	-103 to 400	-454 to 500	-80 to 450	-70 to 185	-100 to 175	25 to 250
Operating Temp Range (°C)	D2117 D746	-32 to 71	-21 to 82	-75 to 205	-268 to 260	-62 to 232	-56 to 85	-73 to 79	-4 to 121
Vacuum		Very Low†	No Vac.	Full Vac.	Full Vac.	No Vac.	Very Low	Full Vac.	Full Vac.
Sterilization*		Autoclave Gas Chemical	Gas Chemical	Autoclave Gas Chemical	Autoclave Gas Chemical	Autoclave Gas Chemical Radiation	Gas	Gas Chemical	Autoclave
Tensile Strength, psi	D638 D412	1650	2000	3000	3000	1250	6000	1700	3700
Color		Crystal Clear	Clear	Transparent	Transparent	Translucent	Transparent	Translucent	Translucent
Odor		Slight	Slight	None	None	None	Slight	Slight	None
Taste Imparted		None	None	None	None	None	None	None	None
Tear Strength		Good	Very Good	Good	Good	Fair	Excellent	Very Good	Excellent
Bend Radius		4 x O.D.	6 x O.D.	8 x O.D.	10 x O.D.	4 x O.D.	6 x O.D.	8 x O.D.	10 x O.D.
Elongation, (%)	D638 D412	450	350	300	300	750	550	600	200
Flame Resistance	D568	Self-ext.	Self-ext.	Self-ext.	Self-ext.	Burns	Burns	Slow Burn	Slow Burn
Abrasion Resistance		Very Good	Good	Very Good	Very Good	Fair	Excellent	Good	Excellent
Corrosion Resistance		Excellent	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Excellent
Permeability** N <sub>2</sub>		0.5 - 2	0.5 - 2	20	18	2,765	0.3 - 5	20	425
O <sub>2</sub>		1 - 6	1 - 6	60	65	7,960	1 - 10	60	25
CO <sub>2</sub>		10 - 35	10 - 35	135	150	20,130	4 - 25	280	90

†Except 180 PVC Vacuum Tubing

### \*Sterilization Guidelines:

- Autoclaving (121°C, 15 psig for 20 minutes) – Clean and rinse item with distilled water before autoclaving. Certain chemicals that have no appreciable effect on resins at room temperature may cause deterioration at autoclaving temperatures unless removed with distilled water beforehand.
- Gas – ethylene oxide, formaldehyde.
- Disinfectants – benzalkonium chloride, formalin, ethanol, etc.
- Dry Heat – 170°C (338°F).
- Radiation – gamma irradiation at 2.5 Mrad with unstabilized plastic.

\*\*Permeability (approx.) – Units:

$$\left\{ \frac{\text{cc} - \text{mm}}{\text{sec} - \text{cm}^2 - \text{cm Hg}} \right\} \times 10^{-10}$$

Not intended for medical or medical device use.

Nalgene 180 and 980 PVC Tubing contain DEHP [Bis (2-ethylhexyl)] phthalate, a commonly used plasticizer.

It is known to the state of California Environment Protection Agency that this chemical causes cancer or reproductive toxicity.

Note: Burial of tubing not recommended. Tubing should be encased in a pipe. For detailed physical and/or chemical properties information, contact Technical Support or visit our website at <http://www.thermoscientific.com>. Tygon® and PharMed® are registered trademarks of Saint-Gobain Performance Plastics.



## ► Chemical Resistance

Material	180	980	890	870	50/65	280	489	689
Acids – Weak	E	E	E	E	E	F	E	E
Acids – Strong	F	F	E	E	G	N	E	E
Alcohol – Aliphatic	G	G	E	E	G	N	E	E
Aldehydes	N	N	E	E	N	F	G	G
Bases – Weak	E	E	E	E	E	G	E	E
Bases – Strong	G	G	E	E	G	F	G	G
Esters	N	N	E	E	F	N	G	G
Hydrocarbons – Aliphatic	F	F	E	E	N	E	F	G
Hydrocarbons – Aromat	icN	N	E	E	N	N	F	F
Hydrocarbons – Halogenat	edN	N	E	E	N	N	N	F
Ketones	N	N	E	E	N	N	G	G
Oxidizing Agents – Strong	F	F	E	E	G	N	F	F

Before using Nalgene tubing with a particular chemical, it is strongly advised that you test it under your own conditions. If any doubt exists regarding a particular application, contact Technical Service.

E – 30 days of constant exposure causes no damage.

G – Little or no damage after 30 days of constant exposure to the reagent.

F – Some effect after 7 days of constant exposure to the reagent.

N – not recommended for continuous use.

## ► Recommended Applications

Material	180	980	890	870	50/65	280	489	689
Dairy	X						X	
Food & Beverage	X				X		X	X
Machinery		X				X	X	X
Dental*	X	X						
Office Machines/Computers		X	X	X		X		
Refrigeration		X	X	X			X	
Transportation		X				X		
Environmental	X		X	X	X			
Instrumentation	X	X				X	X	X
Biotech/Pharmaceutical*	X		X	X	X			
Peristaltic Pumps	X				X			

Nalgene tubing is not a medical device as defined by Class VI criteria set forth in the current US Pharmacopeia, as amended.





## Tolerances

Inches Diameter	180 Inside ± (in)	980 Inside ± (in)	280/290 Inside ± (in)	489/689 Outside ± (in)	870/890 Outside ± (in)	50/65 Inside ± (in)
1/16 and under 1/8	.003	—	.005	.007	.003	.005
1/8 and under 5/16	.008	.012	.009	.007	.003	.005
5/16 and under 1/2	.010	.012	.012	.007	.004	.008
1/2 and under 3/4	.010	.015	.018	.010	.005	.015
3/4 and under 1-1/8	.015	.015	.025	.015	—	.020
1-1/8 and under 1-3/4	.020	.020	.035	.020	—	—
1-3/4 and under 2-1/2	.031	.031	—	.035	—	—

### Wall Thickness

0 to 1/16	.003	—	.005	.006	.003	.005
1/16 to 1/8	.003	—	.006	.008	.003	.005
1/8 to 1/4	.005	—	.009	—	—	—
1/4 to 3/8	.010	—	—	—	—	—
3/8 to 1/2	.015	—	—	—	—	—

Metric Diameter	180 Inside ± (mm)	980 Inside ± (mm)	280/290 Inside ± (mm)	489/689 Outside ± (mm)	870/890 Outside ± (mm)	50/65 Inside ± (mm)
1.6 and under 3.2	.08	—	.13	.18	.08	.13
3.2 and under 7.9	.13	.32	.24	.18	.08	.13
7.9 and under 12.7	.20	.32	.32	.18	.10	.21
12.7 and under 19.1	.26	.39	.48	.26	.13	.38
19.1 and under 28.4	.39	.39	.65	.39	—	.50
28.4 and under 44.5	.52	.52	.91	.52	—	—
44.5 and under 63.5	.79	.79	—	.91	—	—
63.5 and under 76.2	1.17	—	—	—	—	—
76.2 and under 101.6	1.58	—	—	—	—	—

### Wall Thickness

0 to 1.6	.08	—	.13	.16	.08	.13
1.6 to 3.2	.08	—	.16	.20	.08	.13
3.2 to 6.4	.13	—	.24	—	—	.21
6.4 to 9.5	.26	—	—	—	—	—
9.5 to 12.7	.39	—	—	—	—	—



## ► Thermo Scientific Nalgene Vacuum Chamber

polycarbonate or polyetherimide jar, white polypropylene or polycarbonate plate



**Nalgene™ Vacuum Chambers withstand full vacuum without risk of implosion or shattering.**

Useful as a controlled environment chamber for degassing operations and freeze drying.

### details

- Withstands a full vacuum without risk of implosion or shattering
- Useful as a controlled environment chamber for degassing operations and freeze drying
- Transparent

**Includes:** Transparent PC or Amber PEI bell jar; Gasketed white polycarbonate or polypropylene vacuum plate.

**Warning:** Do not expose jar to partially halogenated hydrocarbons or their vapors. Avoid direct exposure of all chemicals to the polycarbonate plate. Do not autoclave when used for vacuum service. Do not use Cat. No. 5305-0609 with organic solvents, acids or bases.

Nalgene Vacuum Chamber

Cat. No.	Jar Material	Capacity, L (gal.)	Plate Material	Outside Jar Dia. x Height, mm (in.)	Plate O.D., mm	Gasket O.D., mm	No. per Pack	No. per Case
5305-0609	PC	4.7 (1-1/4)	PP	170 x 237 (6-5/8 x 9-3/8)	211	178	1	2
5305-0910	PEI	8.3 (2-1/8)	PC	222 x 253 (8-3/4 x 10)	330	321	----	1
5305-1212	PEI	18.9 (5)	PC	305 x 304 (12 x 12)	330	321	----	1

## ► Thermo Scientific Nalgene Replacement Plates for Vacuum Chambers

polypropylene or polycarbonate, neoprene gasket



**Nalgene™ vacuum chamber replacement plates are molded of white polypropylene or polycarbonate, with neoprene gaskets.**

### details

- For use with Nalgene Vacuum Chambers (Cat. No. 5305 series), Nalgene Replacement Bell Jars (Cat. No. DS5320 series), or with glass bell jars up to 12-1/2 in. (31.75 cm) in diameter
- Supplied with 3/32 in. thick (2.4 mm) neoprene gaskets
- Tubing adapter conveniently located on rim of plate, fits 1/4 in. I.D. (6 mm) tubing

Nalgene Replacement Plates for Vacuum Chambers

Cat. No.	For Use With	O.D. x thickness, mm (in.)	Gasket O.D., cm (in.)	No. per Pack	No. per Case
<b>White Polypropylene</b>					
5306-0070	5305-0609	211 x 27 (8-5/16 x 1-1/16)	20 (8)	1	6
<b>White Polycarbonate</b>					
5306-0130	DS5320-0910, DS5320-1212	343 x 27 (13-1/2 x 1-1/16)	20, 28, 33 (8, 11, 13)	1	4



## ► Thermo Scientific Nalgene Replacement Vacuum Jars polyetherimide



**Nalgene™ Replacement Vacuum Jars are chemical-resistant and have a warm amber cast.**

Weigh less than glass and may be used for demanding service.

### details

- Identical to jars included with Cat. Nos. 5305-0910 and 5305-1212
- Lighter weight than glass, easier to handle and won't break, chip or shatter
- Designed to withstand demanding service
- Transparent

**Ordering Information:** Jar only; plate and gaskets must be ordered separately

**Alerts:** Do not autoclave vacuum jars when used for vacuum service. Do not use with unsaturated halogenated hydrocarbons.

### Nalgene Replacement Vacuum Jars

Cat. No.	Capacity, L (gal.)	O.D. x H, mm	No. per Case
DS5320-0910	8.3 (2-1/8)	222 x 253	1
DS5320-1212	18.9 (5)	305 x 304	1



## ► Thermo Scientific Nalgene Repairable Hand-Operated Vacuum Pumps without Gauge

polyvinyl chloride body



**Nalgene™ Hand Vacuum Pumps require only one hand to operate, and vacuum is released with the touch of an index finger.**

New handle design makes these pumps more durable and ergonomic. They quickly attain and hold vacuum of 25 in. (635 mm Hg.). Adjustable vacuum release rate. This economy version is ideal for field or lab use.

### details

- Quickly attain and hold vacuum of 25 in. (635 mm) Hg
- Easy and convenient operation
- Adjustable vacuum release rate provides control
- Full blank port pressure is obtained with only two strokes, making operation efficient
- Removable cover on exhaust port and trigger to release vacuum without disconnecting pumps from the line
- Without vacuum gauge – economical design
- Adjustable vacuum release rate controlled by trigger on pump
- Nozzle fits standard 1/4 in. I.D. tubing
- Can be disassembled for repair and replacement of internal parts (see catalog numbers for repair kits in the table below)

**Includes:** Supplied with 2 ft. length of Clear Plastic Tubing.

### Nalgene Repairable PVC Hand Pump without Gauge

Cat. No.	Use with Repair Kit:	Size	No. per Pack	No. per Case
6131-0010	6132-2000	15 cc/stroke	1.0	4.0
6131-0020	6132-3000	36 cc/stroke	1.0	4.0

## ► Thermo Scientific Nalgene Repairable Hand-Operated Vacuum Pumps with Gauge polyvinylchloride body



**Nalgene™ Repairable Hand-Operated Vacuum Pumps with Gauge are ideal for siphoning, filtration, liquid transfer, bleeding fluid lines and checking for leaks.**

Lightweight units are sealed and self-lubricating with removable covers on exhaust port and trigger to release vacuum without disconnecting pumps from the line. New handle design is more durable and ergonomic. Quickly attain and hold vacuum of 25 in. (635 mm) Hg. Vacuum trigger release requires only one hand to operate and releases vacuum with the touch of an index finger. Adjustable vacuum release rate.

### details

- Gauge monitors vacuum in kPa and inches of mercury for visual indication of pump rate and progress
- Quickly attain and hold vacuum of 1/4 in. (635 mm) Hg
- Easy and convenient operation
- Adjustable vacuum release rate provides control
- Full blank port pressure is obtained with only two strokes, making operation efficient
- Removable cover on exhaust port and trigger to release vacuum without disconnecting pumps from the line
- Adjustable vacuum release rate controlled by trigger on pump
- Nozzle fits standard 1/4 in. I.D. tubing
- Can be disassembled for repair and replacement of internal parts (see catalog numbers for repair kits)

**Includes:** 2 ft. (0.6 m) Nalgene 180 clear plastic tubing.

### Nalgene Repairable PVC Hand Pump with Gauge

Cat. No.	Size	Use with Repair Kit:	No. per Pack	No. per Case
6132-0010	15cc/stroke	6132-2000	1.0	4.0
6132-0020	36cc/stroke	6132-3000	1.0	4.0

## ► Thermo Scientific Nalgene Repairable PVC Hand-Operated Vacuum Pump Repair Kits



Cat. No. 6132-2000



Cat. No. 6132-3000

**Everything you need to maintain and repair the internal parts of your Nalgene™ Cat. Nos. 6131-series and 6132-series hand pumps for extended hand pump life**

**Includes:** Instructions for maintenance and repair.

### Nalgene Repair Kit for PVC Hand Pumps

Description	Size	No. per Pack	No. per Case
6132-2000	Repair Kit for Style 15cc PVC Hand Pumps	1	4
6132-3000	Repair Kit for Style 36cc PVC Hand Pumps	1	4



## ► Thermo Scientific Nalgene Repairable Hand-Operated Pump with Gauge zinc/aluminum



**Nalgene™ Repairable Hand-Operated Pump with Gauge is a multi-purpose vacuum/pressure pump.**

New-style handle is more ergonomic and easy to operate. Cast in corrosion resistant zinc/aluminum and can be disassembled for repair or replacement of internal parts. Hand pump quickly and easily attains a vacuum of 25 in. (635 mm) Hg or a pressure of 30 psi (35kPa).

### details

- Ergonomic handle design makes this pump easier on the hands
- Versatile flip of a lever allows you to change from vacuum to pressure.
- Easily attains a vacuum of 25 in. (635 mm) Hg or a positive pressure of 30 psig (35 kPa)
- Features a pumping rate of 15 cc/stroke
- Full blank pressure with only two strokes makes this hand pump efficient and ergonomic
- Trigger releases vacuum or pressure without disconnecting the tubing for added convenience, efficiency and ergonomics
- Gauge is calibrated in inches of Mercury and in kPa
- Attaches to 1/4 in. (63.5 cm) I.D. flexible tubing. Includes a 2 ft. (0.7 m) length of clear PVC tubing
- Use repair kit 6133-2000 for maintenance and repair of internal parts to extend hand pump life-time

**Includes:** Instructions for maintenance and repair.

### Nalgene Repairable Metal Hand Pump

Cat. No.	For use with 6133-0010	No. per Pack	No. per Case
6133-0010	15 cc/stroke	1	4

## ► Thermo Scientific Nalgene Metal Hand-Operated Vacuum Pump Repair Kit



**Nalgene™ Metal Hand-Operated Vacuum Pump Repair Kit includes everything necessary to perform maintenance on the new style Nalgene repairable zinc/aluminum hand pumps (manufactured 2009 and later).**

The new style hand pumps are most easily recognized by their smooth profile, ergonomic handles (as pictured in Cat. No. 6133-0010 listing).

### details

- Everything you need to maintain and repair the internal parts of your Nalgene Cat. No. 6133-0010 metal hand pump (new style with smooth, curved profile handle only; not compatible with old-style hand pumps) for extended hand pump life

**Includes:** Instructions for maintenance and repair.

### Nalgene Repair Kit for Metal Hand Pump

Cat. No.	For use with	No. per Pack	No. per Case
6133-1000	Repair Kit for 6133 ZN	1	4
6133-2000	Repair Kit for Metal Hand Pump	1	4





## ► Thermo Scientific Nalgene Vacuum Pump Aspirator

polypropylene, polyethylene tubing



**Nalgene™ Vacuum Pump Aspirator attaches directly to sink faucets for vacuum draw.**

Can draw 11.5 L air per minute at a water flow rate of 6.5 L per minute. Operates efficiently with water pressures as low as 7.5 psig for minimum water consumption. Comes with an integral check valve and tubing for insertion in discharge end.

### details

- Attaches to a standard faucet with 3/8 in. NPT connecting thread for easy installation
- Maximum free air pumping capacity of 11.5 L per minute with a water flow rate of 6.5 L per minute.
- Ultimate achievable vacuum of 28-1/2 in. (724 mm) Hg
- Discharge end equipped with 4-3/4 in. (12 cm ) length of tubing to direct discharge water toward the drain or to allow attachment to additional discharge tubing
- Integral check valve prevents loss of vacuum when water source is disrupted and prevents backflow

**Includes:** Integral check valve, 3/8 in. NPT connecting thread, 4-3/4 in. (12 cm) of tubing.

### Nalgene Vacuum Pump Aspirator

Cat. No.	Ultimate Vacuum, in.	No. per Pack	No. per Case
6140-0010	28-1/2 Hg	1	24



## ► Thermo Scientific Nalgene Sample Vials with Closure

linear low-density polyethylene



**Nalgene™ Sample Vials have a friction-fit, snap closure.**

Useful for samples, pH cups, weighing vessels and packing applications. Will not shatter like glass or polystyrene vials.

### details

- Straight sided vials allow easy access for filling and emptying
- Friction-fit closures are completely removable and snap in place for convenient vial access
- Translucent wall allow user to see vials are filled or empty
- Low density polyethylene is impact resistant and shatter-proof even at temperatures down to -100°C

**Nalgene Sample Vials with Closure**

Cat. No.	Capacity, mL	O.D. with Closure, mm	Height with Closure, mm	No. per Pack	No. per Case
6250-0005	5	23.6	24.9	12	144
6250-0012	12	27.1	35.6	12	144
6250-0018	18	27.1	52.6	12	144
6250-9028	28	27.1	84.6	12	144
6250-9050	50	37.3	70.9	12	144
6250-9075	75	37.3	107.3	12	144

### ► Select the perfect container for your application.

Go to: [www.thermoscientific.com/nalgenecontainers](http://www.thermoscientific.com/nalgenecontainers)  
or download our free apps from iTunes or the Android market  
– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Economy Wash Bottles

low-density polyethylene bottle, polypropylene screw closure/stem; polypropylene copolymer draw tube



**Nalgene™ Economy Wash Bottles** are designed to dispense through the top with a closure and stem molded in one piece for uniform leakproof service.

Tip can be cut back to increase flow. Tight fit of draw tube and closure prevents separation when squeezing bottle.

### details

- Designed to dispense uniformly through the top with a closure and stem molded in one piece for leakproof service and a straight, steady stream
- Tip can be cut back to provide increased flow
- Tight fit of draw tube and closure prevents separation when squeezing bottle
- Fully assembled
- Leakproof†

### Nalgene Economy Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure size, mm	No. per Pack	No. per Case
2401-0125	125 (4)	24	6	48
2401-0250	250 (8)	24	6	36
2401-0500	500 (16)	28	6	24
2401-1000	1000 (32)	38-430	4	12
712401-0001	28 mm Replacement Closure stem and Draw Tube for 2401-0500			25
712401-0002	24 mm Replacement Closure stem and Draw Tube for 2401-0125, -0250			25



## ► Thermo Scientific Nalgene Unitary Wash Bottles

low-density polyethylene bottle/tubulation, polypropylene screw closure



**Nalgene™ Unitary™ Wash Bottles are designed with a wide mouth for faster, easier filling.**

Bottle and tubulation are molded in one piece for uniform leakproof service and precision flow without sputtering. Tip can be cut back to increase flow. Contents can be dispensed without tipping or shaking.

### details

- Designed with a wide mouth for faster, easier filling
- Bottle and tubulation are molded in one piece for uniform leakproof service
- Tip delivers a uniform, straight, ultrafine stream without sputtering, but can also be cut back to increase flow
- Contents can be dispensed without tipping or shaking
- No assembly required
- Leakproof†

### Nalgene Unitary Wash Bottles

Cat. No.	Capacity, mL (oz)	Closure size, mm	No. per Pack	No. per Case
2402-0125	125 (4)	24	6	48
2402-0250	250 (8)	38	4	36
2402-0500	500 (16)	38	4	24
2402-0750	750 (25)	38	4	24
2402-1000	1000 (32)	43	2	12



## ► Thermo Scientific Nalgene Wash Bottles

Teflon® FEP bottle, Tefzel™ ETFE screw closure/stem and draw tube



**Nalgene™ Teflon® FEP Solvent Wash Bottles offer excellent chemical resistance and are molded entirely of fluoropolymers.**

Designed to dispense through the top with a closure and stem molded in one piece for uniform leakproof service. They provide contamination-free dispensing – useful for trace element work. Tight fit of draw tube and closure prevents separation when squeezing bottle.

### details

- With Tefzel ETFE screw closure/stem and draw tube
- Demonstrates excellent chemical resistance to nearly any chemical in your lab including solvents – won't embrittle or crack
- Inert fluoropolymer construction is low in extractables and low-binding – useful for trace element work; phthalate-free
- Designed to dispense uniformly through the top with a closure and stem molded in one piece for leakproof service and a steady, straight stream
- Fully assembled – no assembly required
- Tip can be cut back to provide increased flow
- Closure won't disengage from bottle when squeezed
- Outstanding chemical compatibility with virtually all chemicals and temperature extremes
- Autoclavable/Leakproof<sup>†</sup>/Teflon® FEP/Transparent

*Notes: After autoclaving, adjust nozzle angle to < 90° angle while cooling to ensure stream is pointing downward.*

Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation.

### Nalgene Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure size, mm	No. per Pack	No. per Case
2403-0125	125 (4)	24	1	4
2403-0250	250 (8)	24	1	4
2403-0500	500 (16)	38-430	1	4
2403-1000	1000 (32)	38-430	1	2



## ► Thermo Scientific Nalgene Wide-Mouth Wash Bottles

low-density polyethylene bottle, polypropylene screw closure/stem, polypropylene copolymer draw tube



**Nalgene™ Wide-Mouth Wash Bottles feature a wide-mouth design for easy filling and a through-the-top closure and stem molded in one piece.**

Flexible bottles with easy-to-fill wide mouth with one piece closure and stem.

### details

- Designed to dispense uniformly through the top with a closure and stem molded in one piece for leakproof service
- Precision molded tip provides a straight stream free from sputter
- Tip can be cut back to provide increased flow
- Tight fit of draw tube and closure prevents separation when squeezing bottle
- Fully assembled – no assembly required
- Leakproof†

### Nalgene Wide-Mouth Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Pack	No. per Case
2407-0500	500 (16)	53	4	24
2407-1000	1000 (32)	63	2	12



## ► Thermo Scientific Nalgene Narrow-Mouth Color-Coded Wash Bottles

low-density polyethylene bottle, polypropylene screw closure/stem and draw tube



**Nalgene™ Color-Coded Wash Bottles with red, blue, green or yellow closures/stems permit easy content identification.**

Bottles are designed to dispense through the top with a closure and stem molded in one piece for uniform leakproof service. Precision molded tip provides a straight, steady stream without sputtering.

### details

- Color-coded top lets you coordinate reagents with industry storage codes
- Designed to dispense uniformly through the top with a closure and stem molded in one piece for leakproof service and precision control
- Tip can be cut back to provide increased flow
- Tight fit of draw tube and closure prevents separation when squeezing bottle
- Fully assembled – no assembly required
- Leakproof†

### Nalgene Narrow-Mouth Color-Coded Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Color Code	No. per Pack	No. per Case
2422-2500	500 (16)	28	Yellow	6	24
2422-3500	500 (16)	28	Blue	6	24
2422-4500	500 (16)	28	Green	6	24
2422-5500	500 (16)	28	Red	6	24

## ► Thermo Scientific Nalgene Color-Coded Unitary Wash Bottles

low-density polyethylene bottle/tubulation, polypropylene screw closure



**Nalgene™ Color-Coded Unitary™ Wash Bottles come in a convenient, pre-packaged, color-coded, easy-to-identify assortment.**

Red, white, blue or yellow closures/stems on these flexible unitary bottles permit easy content identification. Designed with a wide mouth for faster, easier filling. Bottle and tubulation are molded in one piece for uniform leakproof service.

### details

- Includes one bottle of each color closure (red, white, yellow and blue) per package
- Designed with a wide mouth for faster, easier filling
- Bottle and tubulation are molded in one piece for uniform leakproof service
- Tip delivers a straight, uniform, ultrafine stream, but can also be cut back to increase flow
- Contents can be dispensed without tipping or shaking
- Leakproof†

**Includes:** A sample of Polypaper™ Right-To-Know Custom Labeling System (Cat. No. 6316-1000).

### Nalgene Color-Coded Unitary Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Description	No. per Pack	No. per Case
2423-0500	500 (16)	38-415	Color-Coded Unitary Wash Bottles Assortment	4	16



## ► Thermo Scientific Nalgene Unitary Safety Wash Bottles

red low-density polyethylene bottle/tubulation, red polypropylene screw closure



**Nalgene™ Unitary Safety Wash Bottles feature a wide mouth for faster, safe filling, and are red for easy identification.**

Bottle and tubulation are molded in one piece for uniform leakproof service. Precision molded tip provides a steady, straight stream without sputtering. Contents can be dispensed without tipping or shaking.

### details

- Colored red for easy identification and instant recognizability, for use with acids, bases and alcohols
- Designed with a wide mouth for faster, easier filling
- Bottle and tubulation are molded in one piece for uniform leakproof service
- Tip delivers a uniform, straight, ultrafine stream for precision dispensing, but can also be cut back to increase flow
- Leakproof†

### Nalgene Unitary Safety Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Case
DS2408-0250	250 (8)	38	4
DS2408-0500	500 (16)	38	4

## ► Thermo Scientific Nalgene Autoclavable Wash Bottles

polypropylene copolymer bottle, polypropylene screw/stem and draw tube



**Nalgene™ Autoclavable Wash Bottles are useful for dispensing sterile water or reagents wherever it is necessary to reduce the risk of contamination.**

Flexible and contact-clear, these bottles are designed to dispense through the top with a closure and stem molded in one piece for uniform leakproof service. Bent stem dispensing tube retains its bend after autoclaving but bend angle can be modified by hand while warm if desired.

### details

- With polypropylene screw/stem and draw tube
- Designed to dispense uniformly through the top with a closure and stem molded in one piece for leakproof service
- Tip can be cut back to provide increased flow
- Tight fit of draw tube and closure prevents separation when squeezing bottle
- Fully assembled – no assembly required
- Autoclavable/Leakproof†

*Notes: After autoclaving, adjust tip to < 90° angle during cooling to ensure stream is pointing downward.*

### Nalgene Autoclavable Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Pack	No. per Case
2405-0500	500 (16)	28	6	24
2405-1000	1000 (32)	38-430	4	12

## ► Thermo Scientific Nalgene Fluorinated Solvent Wash Bottles

fluorinated high-density polyethylene, red fluorinated polypropylene closure/stem; polypropylene draw tube



**Nalgene™ Fluorinated Solvent Wash Bottles are self-venting, so solvent stays in the bottle with no risk of leakage.**

Offers low permeability and excellent chemical resistance to many organic solvents. “Solvent Wash Bottle” silk-screened in red on the bottle. Fluorinated HDPE reduces the risk of absorption of the solvent into the bottle itself. Designed to dispense through the top with a closure and stem molded in one piece for uniform leakproof† service.

### details

- With polypropylene draw tube
- Translucent fluorinated HDPE wash bottle with red polypropylene closure and stem
- Non-metallic vent keeps solvent in the bottle and prevents self-dispensing
- Bright red lettering silk-screened on bottle reads “Solvent Wash Bottle” for easy identification and no mix-ups
- Low permeability and excellent chemical resistance to many organic solvents used in HPLC, TLC, and gas chromatography
- Useful over a temperature range from 0° to 90°C (32° to 194°F)
- Wide mouth designed for easy filling
- Tip molded to provide a straight stream with precision control
- Tip can be cut back to increase flow
- Tight fit of draw tube and closure prevents separation when squeezing bottle
- Leakproof†

### Nalgene Fluorinated Solvent Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	No. per Pack	No. per Case
2421-0500	500 (16)	53	2	4

## Chemical Safety Products

Choose from a wide range of Thermo Scientific Nalgene products specially designed for dispensing, labeling, disposing of hazardous waste, transporting and carrying chemical bottles. Cat. Nos. 2425 and 2436 comply with this U.S. OSHA Hazard Communication Standard, 29 CFR Part 1910.1200 (f) (4).\*

### The Anatomy of Nalgene® Right-To-Know Safety Products

Nalgene Right-To-Know safety products help your laboratory meet regulatory requirements for labeling chemical containers in the workplace. These symbols have been devised to provide instantly recognizable, standard symbols for the care, handling and storage of commonly-used laboratory chemicals. Nalgene Right-To-Know bottles and labeling incorporate the standard U.S. Department of Transportation (DOT), National Fire Protection Association (NFPA) and International Chemical Society (ICS) formulas. They also comply with U.S. Occupational Safety and Health Administration (OSHA) Hazardous Communication standards. Bottles are break-resistant, flexible, translucent and guaranteed leakproof. Labels are waterproof, chemical resistant and adhere well to plastic, glass and metal.

### Chemical Name and Symbol

Chemical name in bold print (generic name in parentheses), followed by the ICS formula.

### NFPA Diamond

Uses the standard NFPA codes, ranking hazards according to the chemical's reaction to the presence of fire. The red, blue and yellow diamonds use a rating scale of 4 to 0, with 4 representing the greatest hazard and 0 the least. The bottom diamond uses pictograms.

#### Top Diamond

Red: Flash Point  
4 - Below 70°F/21°C  
3 - Below 100°F/38°C  
2 - Below 200°F/93°C  
1 - Above 200°F/93°C  
0 - Non-flammable

#### Right-hand Diamond

Yellow: Reactivity  
4 - Explosive  
3 - Shock and heat may detonate  
2 - Violent change may occur  
1 - Unstable if heated  
0 - Normally stable

#### Left-hand Diamond

Blue: Health Hazard  
4 - Deadly  
3 - Extremely dangerous  
2 - Hazardous  
1 - Slightly hazardous  
0 - Normal material

#### Bottom Diamond

White: Health Warnings  
Air-reactive  
Water-reactive  
Carcinogenic  
Radioactive

### Hazard Code

Primary hazards represented by appropriate GHS symbol



### DOT/UN Number

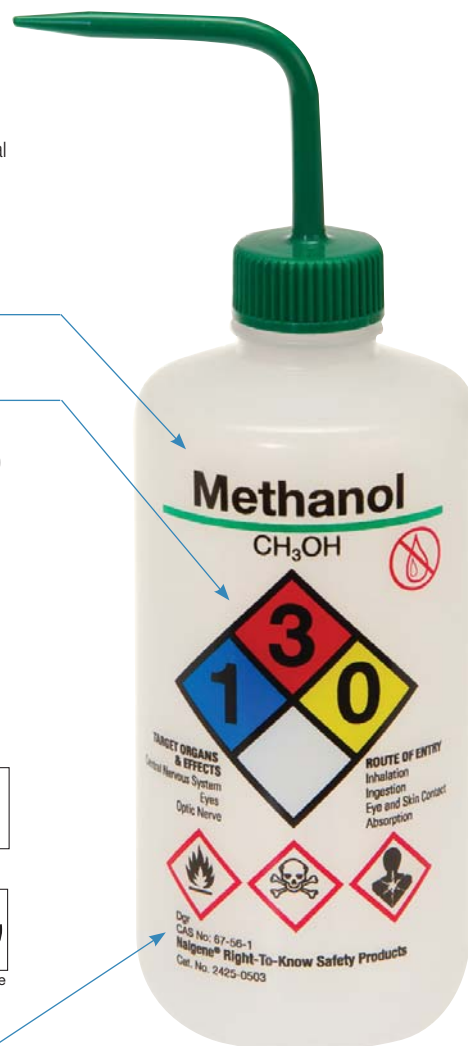
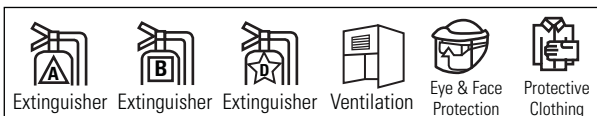
Four-digit number, preceded by UN or NA (North America), used to identify particular materials and regulate their transportation. These four digit numbers are called product identification numbers (PINs) under Canadian Transportation and Dangerous Goods Regulations.

### Hazard Code

(See description above)

### Safety Equipment

Required protective equipment represented by the appropriate pictogram, including fire extinguishers:  
Extinguisher A - general use  
Extinguisher B - flammable liquids  
Extinguisher D - flammable materials



### CAS Number

Chemical Abstract Service Number

Chemical: \_\_\_\_\_ Thermo Scientific Nalgene PolyPaper Right-To-Know Labels

DOT/UN No.: \_\_\_\_\_ CAS No.: \_\_\_\_\_

Hazard Codes: \_\_\_\_\_ NFPA Code \_\_\_\_\_

Safety Equipment: \_\_\_\_\_

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

Storage Color: Red Storage Color: White Storage Color: Yellow Storage Color: Orange Storage Color: Blue

Extinguisher A Extinguisher B Extinguisher D Ventilation Eye & Face Protection Protective Clothing

0 1 2 3 4 0 1 2 3 4 0 1 2 3 4

Corrosive Irritant Toxic Flammable Oxidizer Explosive

Air-reactive Water-reactive Carcinogenic Radioactive

Extinguisher A Extinguisher B Extinguisher D Ventilation Eye & Face Protection Protective Clothing

### Storage Color

Color indicates the appropriate storage area:  
RED - flammable  
BLUE - health hazard  
YELLOW - reactive  
WHITE - contact hazard (corrosive)  
ORANGE - general storage

### NFPA Diamond

(See description above)

## ► Thermo Scientific Nalgene Right-To-Know Custom Labeling System polyolefin with clear plastic overlay



**Nalgene™ Right-To-Know customer labeling system is ideal for creating chemical labels that identify the chemical and its properties.**

Clear plastic adhesive overlay is provided to protect the label markings from chemicals. Refer to the appropriate Material Safety data sheet (MSDS) or other reference material to verify the correct codes. Complete instructions included with each package.

### details

- Overlay is provided to protect label from chemical contact
- Refer to the appropriate Material Safety Data Sheet (MSDS) or other reference material to verify the correct codes required for accurate and safe use.
- Hazard symbol stickers are GHS compliant

*Notes: Complete instructions included with each package.*

### Nalgene Right-To-Know Custom Labeling System

Cat. No.	L x W, mm (in.)	No. per Pack	No. per Case
6316-1000	76.2 x 127 (3 x 5)	25	150



## ► Thermo Scientific Nalgene Vented Unitary Right-To-Know Wash Bottles

low-density polyethylene bottle, polypropylene or high-density polyethylene closure, polytetrafluoroethylene membrane



**Nalgene™ Vented Unitary™ Right-To-Know Wash Bottles** feature a unique vent system that keeps hazardous volatile liquids in the wash bottles and off the lab bench.

Marked with four colors, NFPA diamonds, GHS compliant hazard symbols, and Right-To-Know chemical information. Choose from seven chemical markings. A strong, straight and steady stream of liquid is dispensed when the wash bottle is squeezed. Unitary bottle prevents contamination when filling the bottle; no draw tube assembly to pick up contamination off the lab bench. Vented.

Choose from six different chemicals.

### details

- With polypropylene or high-density polyethylene closure, polytetrafluoroethylene membrane
- Bottle and tubulation molded in one piece to prevent chemical splash when removing closure and contamination when filling
- Unique 38 mm colored, vented closure designed to prevent dripping
- Sturdy polypropylene closures – HDPE on Sodium Hypochlorite (bleach) bottles
- Color-coded bar corresponds to closure, preventing cross-contamination
- Prelabeled with ICS name and formula, as well as NFPA symbols for chemical handling, hazard, care and storage of six commonly-used chemicals
- Fully assembled
- Leakproof†

**Compliance:** Meets OSHA requirements for workplace chemical container labeling.

### Nalgene Vented Unitary Right-To-Know Wash Bottles

Cat. No.	Capacity, mL (oz.)	Chemical	Closure Color	No. per Pack	No. per Case
2436-0251	250 (8)	Acetone	Red	4	36
2436-0255	250 (8)	Distilled Water	Natural	4	36
2436-0501	500 (16)	Acetone	Red	4	24
2436-0502	500 (16)	Ethyl Alcohol	White	4	24
2436-0503	500 (16)	Methanol	Green	4	24
2436-0504	500 (16)	Isopropanol	Yellow	4	24
2436-0505	500 (16)	Distilled Water	Natural	4	24
2436-0506	500 (16)	Sodium Hypochlorite (Bleach)	White	4	24
2436-0507	500 (16)	Deionized Water	Natural	4	24
2436-1001	1000 (32)	Acetone	Red	2	12
2436-1005	1000 (32)	Distilled Water	Natural	2	12



► **Thermo Scientific Nalgene Right-To-Know Narrow-Mouth Wash Bottles**  
white low-density polyethylene or polypropylene copolymer bottle; polypropylene or high-density polyethylene closure, polypropylene copolymer fill tube



**Nalgene™ Right-To-Know Narrow-Mouth Wash Bottles are flexible for easy dispensing and translucent for viewing contents.**

Helps laboratories meet regulatory labeling requirements for chemical containers, using standard, instantly-recognizable symbols and colors.

Sodium Hypochlorite bottle is white LDPE with HDPE closure for light-protective barrier qualities between 280 and 450 nm; all others have natural bottles and polypropylene closures. Bottles are self-venting, so contents stay in the bottle with no risk of leakage. Feature chemical name, International Chemical Society (ICS) chemical formula and Chemical Abstract Service (CAS) number. Each bottle has a color bar which corresponds to its colored closure to prevent cross-contamination.

### details

- With polypropylene or high-density polyethylene closure, polypropylene copolymer fill tube
- Self-venting, but contents stay in the bottle with no risk of leakage
- Chemical name, International Chemical Society (ICS) chemical formula and Chemical Abstract Service (CAS) number printed on bottle for easy identification
- Each bottle has a color bar which corresponds to its colored closure to prevent cross-contamination
- Designed to dispense through the top with a closure and stem molded in one piece for uniform leakproof service
- Tip can be cut back to increase flow
- Tight fit of draw tube and closure prevents separation when squeezing bottle
- Leakproof†

**Ordering Information:** Available in packs of the same 16 or 32 oz. (500 or 1000 mL) bottle, or in a 5-bottle (16 oz./500 mL only) assortment pack consisting of one each acetone, ethyl alcohol, isopropanol, methanol, and distilled water.

**Compliance:** Meets requirements of OSHA Hazard Communication Regulation [29 CFR 1910.1200(f)(4)].

### Nalgene Right-To-Know Narrow-Mouth Wash Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Label Description	No. per Pack	No. per Case
2425-0500	500 (16)	28	Assorted	5	20
2425-0501	500 (16)	28	Acetone	6	24
2425-0502	500 (16)	28	Ethyl Alcohol	6	24
2425-0503	500 (16)	28	Methanol	6	24
2425-0504	500 (16)	28	Isopropanol	6	24
2425-0505	500 (16)	28	Distilled Water	6	24
2425-0506	500 (16)	28	Sodium Hypochlorite (Bleach)	6	24
2425-0507	500 (16)	28	Deionized Water	6	24
2425-1002	1000 (32)	38-430	Ethyl Alcohol	4	12
2425-1003	1000 (32)	38-430	Methanol	4	12
2425-1004	1000 (32)	38-430	Isopropanol	4	12
2425-1005	1000 (32)	38-430	Distilled Water	4	12
2425-1006	1000 (32)	38-430	Sodium Hypochlorite (Bleach)	4	12



## ► Thermo Scientific Nalgene Biohazardous Waste Containers polypropylene



**Nalgene™ Biohazardous Waste Containers are ideal autoclavable plastic waste containers for secondary containment of biohazardous waste materials.**

Convenient one-step sterilization; no need to remove bag. Port opening in cover allows one-handed disposal of materials; limits exposure to infectious waste. Holds standard sized autoclave bags. Will not rust, dent or puncture. Symbol printed in English and Spanish.

### details

- Ideal autoclavable plastic waste containers for secondary containment of biohazardous waste materials
- Convenient one-step sterilization; no need to remove bag
- Port opening allows one-handed disposal of materials, limiting exposure to infectious waste
- Will not rust, dent or puncture like other materials
- Holds standard sized autoclave bags (not included)
- Autoclavable/Biohazard

**Compliance:** U.S. OSHA Standard 29 CFR Part 1910.1030 for use as protection against blood-borne pathogens.



### Nalgene Biohazardous Waste Containers

Cat. No.	Capacity, L (gal.)	O.D. x H , cm (in.)	No. per Pack	No. per Case
6370-0004	5.5 (1-1/2)	22 x 28 (8-3/4 x 11)	1	1
6370-0005	19 (5)	28 x 43 (11 x 17)	1	1
6370-0015	57 (15)	34 x 74 (13-1/4 x 29)	1	1



## ► Thermo Scientific Nalgene Safety Waste Funnel Systems

high-density polyethylene funnels and covers, polypropylene closure and funnel adaptor, polytetrafluoroethylene vent membrane



**Nalgene™ Safety Waste Funnel Systems feature the Easy Snap Safety Latch to minimize spillage if accidentally tipped over and a larger diameter funnel for easy pouring.**

Ideal for temporary waste containment on the benchtop or under a lab hood. Vent system helps reduce fumes and splashing. Removable neck screen traps large particles, like stir bars. Designed for solvent, chemical and biological waste. Recommended for use with Nalgene containers (sold separately).

### details

- Vent system helps reduce fumes and splashing
- Removable neck screen traps large particles, like stir bars
- Available in 25 cm (10 in.) diameter funnel with 83B closure and 14 cm (5-1/2 in.) funnel with 38-430 closure
- For safe transfer of solvent, chemical and biological waste

**Includes:** HDPE funnel with attached lid, polypropylene closure/funnel adapter, screen insert, polypropylene/PTFE 0.45 µm vent plug, and filter.

### Nalgene Safety Waste Funnel Systems

Cat. No.	Closure Size, mm	Funnel Top Dia x Stem L, cm (in.)	No. per Case
6378-0004	38-430	14 x 5.6 (5-1/2 x 2-1/4)	4
6378-0010	83-B	25.4 x 5.6 (10 x 2-1/4)	2



## ► Thermo Scientific Nalgene Safety Waste Funnel Systems

high-density polyethylene safety waste funnel and high-density polyethylene or fluorinated high-density polyethylene container



**Nalgene™ Safety Waste Funnel Systems are chemical- and break-resistant, designed for temporary storage of solvent, chemical and biological wastes.**

Safety waste funnel has an Easy Snap safety latch to minimize accidental spills and volatile emissions. Funnel easily unscrews from funnel adapter for cleaning and quicker access. Closure/adapter includes a vent that releases pressure when pouring, and reduces emissions during use; can also connect to an external syringe filter. Includes a Nalgene collection container.

### details

- 4 L safety waste system includes a 5-1/2 in. (14 cm) safety waste funnel and 4 L HDPE Nalgene bottle and bottle closure
- 10 L safety waste system includes a 10 in. (25 cm) safety waste funnel and a 10 L fluorinated HDPE (FLPE) carboy and carboy closure
- Large-diameter funnel has attached cover with Easy Snap\* safety latch to minimize accidental spills and volatile emissions
- Funnel easily unscrews from polypropylene closure/funnel adapter for cleaning and quicker access
- Closure/adapter includes vent with polypropylene/PTFE vent plug that releases pressure during pouring, and prevents emissions during use
- Adapter can also connect to external syringe filter
- Removable polypropylene screen insert fits at bottom of funnel to trap large particles such as stir bars
- Not resistant to long-term UV light exposure

**Ordering Information:** Secondary containers (sold separately) should be used with Safety Waste Systems during transport, transfer or storage.

**Includes:** (4 L) HDPE or (10 L) fluorinated HDPE container, PP container closure, removable funnel with lid, closure/funnel adapter, filter, and screen insert.

*Notes: These systems are not safety cans as defined by OSHA guidelines and are designed for temporary waste disposal only. Waste should be disposed of prior to 90 days of initial waste accumulation.*

### Nalgene Safety Waste Funnel Systems

Cat. No.	Capacity, L	Closure Size, mm	Funnel Top Dia. x Stem L, cm (in.)	Container Material	No. per Case
6379-0004	4	38-430	14 x 5.6 (5-1/2 x 2-1/4)	HDPE	1
6379-0010	10	83B	25 x 5.6 (10 x 2-1/4)	FLPE	1



## ► Thermo Scientific Nalgene Large Waste Containers with Cover polypropylene



**Nalgene™ Large Waste Containers with covers are ideal for holding and sterilizing refuse, clothing, equipment, labware and contaminated material.**

Friction-fit closure fits securely. Meets OSHA Standard 29 CFR Part 1910.1030 for use as protection against bloodborne pathogens. Cover must be removed before autoclaving.

### details

- Friction-fit closure fits securely
- Meets OSHA Standard 29 CFR Part 1910.1030 for use as protection against bloodborne pathogens
- Molded-in handgrips make lifting easy
- Autoclavable/Biohazard

**Compliance:** Meets OSHA Standard 29 CFR Part 1910.1030 for use as protection against bloodborne pathogens

*Notes: Autoclave upright. Lid must be removed before autoclaving.*

### Nalgene Large Waste Containers with Cover

Cat. No.	Capacity, L (gal.)	O.D. x H , cm (in.)	No. per Pack	No. per Case
6920-0060	23 (6)	28 x 46 (11 x 18)	1	4
6920-0120	45 (12)	36 x 58 (14 x 23)	1	4



# invitro fertilization | 408-417

Safety. Safety. Reproducibility.

Quality is the key to reliability. Thermo Scientific Nunc IVF products are rigorously tested, certified and produced under ISO 13485 to ensure maximum consistency and quality, with no lot-to-lot variability. From the collection of gametes to fertilization, maturation and embryo storage – our line of IVF products helps to ensure optimal results at every stage of development, in and out of the lab.

## **Collection & Preparation**

By emphasizing the quality and safety of products that contact gametes, including MEA and HSSA testing of consumables, we deliver highly reliable products for the collection and preparation of male and female gametes.

## **Embryo Fertilization, Maturation & Transfer**

Achieve superior embryo growth during embryo fertilization, maturation and transfer with products that are engineered for superior handling and optimal heat transfer. Our products are certified medical devices for IVF in order to provide an extra guarantee of consistency and quality.

## **Gamete & Embryo Storage**

You can optimize your frozen embryo transfer success rate with safe and convenient storage solutions, including cryopreservation – offering multiple chances to achieve pregnancy from a single oocyte retrieval cycle.

► Testing results are available online for every lot at  
[www.thermoscientific.com/ivf](http://www.thermoscientific.com/ivf)



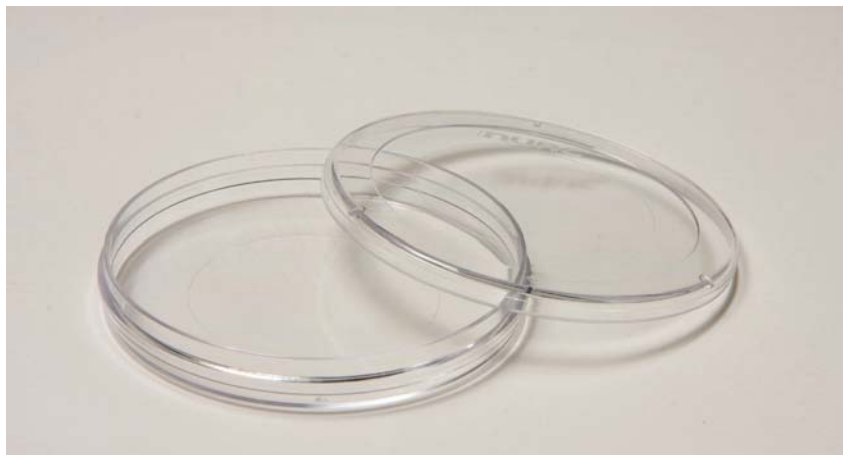
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## consistent results



## ► Thermo Scientific Nunc IVF ICSI Dish



**Nunc™ IVF ICSI Dishes meet the exacting requirements of IVF testing, certification, and validation, providing consistently reliable, high-quality results during fertilization.**

### details

#### Innovative features for quality and ease-of-use

- Maintain optimal temperature with true flat bottom
- Low profile provides optimal angles during ICSI process
- Clearly see sample with super polished optical center
- Increased safety with easy grip design
- Certificates of conformity available for every lot

#### Rigorously tested, certified and validated for IVF

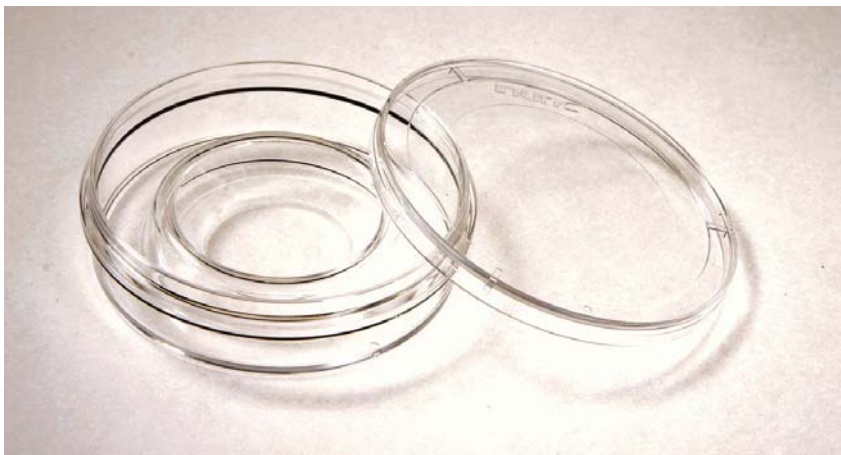
- CE-marked, FDA cleared and MEA tested
- Produced under ISO 13485 with full lot traceability
- Certificates of conformity for your assurance on every lot
- Sterile (SAL  $10^{-6}$ )
  - Non-pyrogenic (LAL test)
  - USP Class VI test
  - Release test results (MEA)

#### Nunc IVF ICSI Dish

Cat. No.	Surface	Lid	No. per Pack	No. per Case
150265	Non-treated	Yes	1	120



## ► Thermo Scientific Nunc Center Well Dish for IVF



**Nunc™ Center Well Dishes provide consistently reliable, high-quality results during embryo and oocyte washing.**

### details

#### Innovative features for quality and ease-of-use

- Perfect angle of reservoir well walls for locating and easy washing of samples
- Maintain optimal temperature with true flat bottom
- Increased safety with easy grip design
- Certificates of conformity available for every lot

#### Rigorously tested, certified and validated for IVF

- CE-marked, FDA-cleared and MEA-tested
- Produced under ISO 13485 with full lot traceability
- Certificates of conformity for your assurance on every lot
  - Sterile (SAL 10<sup>-6</sup>)
  - Non-pyrogenic (LAL test)
  - USP Class VI test
  - Release test results (MEA)

#### Nunc Center Well Dish for IVF

Cat. No.	Surface	Lid	No. per Pack	No. per Case
150260	Non-treated	Yes	1	120



## ► Thermo Scientific Nunc IVF Petri Dishes



**Nunc™ IVF Petri Dishes deliver consistently reliable, high-quality results during IVF.**

Nunc InVitro Fertilization Products provide security, safety and reproducibility for your valuable samples, and are uniquely certified based on a 1-cell stage mouse embryo toxicity test with available lot-specific certification.

### details

#### Innovative features for enhanced results

- Facilitates gas exchange with vented lid
- Choose the correct size for your application; available in 35 mm, 60 mm and 90 mm sizes
- Certificates of conformity available for every lot

#### Rigorously tested, certified and validated for IVF

- CE-marked, FDA cleared and MEA tested
- Produced under ISO 13485 with full lot traceability
- Certificates of conformity for your assurance on every lot
  - Sterile (SAL 10<sup>-6</sup>)
  - Non-pyrogenic (LAL test)
  - USP Class VI test
  - Release test results (MEA)

#### Nunc IVF Petri Dishes

Cat. No.	Culture Area, cm <sup>2</sup>	Surface	O.D. x H mm	No. per Pack	No. per Case
150255	8.8	Non-treated	35 x 11	10	500
150270	21.5	Non-treated	54 x 14	10	400
150360	56.7	Non-treated	88 x 15	10	150





## ► Thermo Scientific Nunc 4-Well Dishes for IVF



**Nunc™ 4-Well Dishes meet the rigorous requirements of IVF testing, certification, and validation, providing consistently reliable, high-quality results during vitrification.**

### details

#### Innovative features for quality and ease-of-use

- Ensures proper orientation and prevents cross contamination with notched lid and dish
- Prevents scratches on well bottoms and maintains optimal temperature with 0.8 mm raised edge
- Certificates of conformity available for every lot

#### Rigorously tested, certified and validated for IVF

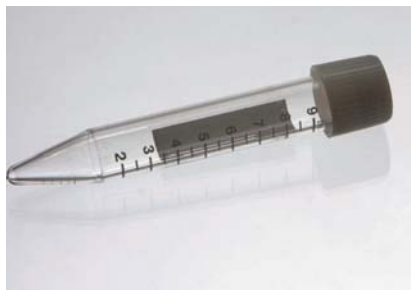
- CE-marked, FDA cleared and MEA tested
- Produced under ISO 13485 with full lot traceability
- Certificates of conformity for your assurance on every lot
  - Sterile (SAL  $10^{-6}$ )
  - Non-pyrogenic (LAL test)
  - USP Class VI test
  - Release test results (MEA)

#### Nunc IVF 4-Well Dishes

Cat. No.	Culture Area, cm <sup>2</sup>	External dimensions, mm	Surface	No. per Pack	No. per Case
144444	1.9	66 x 66	Nunclon™ Delta treated	4	120
179830	1.9	66 x 66	Non-treated	4	120



## ► Thermo Scientific Nunc IVF 11 mL Centrifuge Tube



**Nunc™ IVF 11 mL Centrifuge Tubes** meet the exacting requirements of IVF testing, certification, and validation, providing consistently reliable, high-quality results during preparation of sperm samples.

### details

- Minimize Product waste with package size of five tubes per pack
- Quickly identify sample volume with clear graduations
- Compatible with common centrifuge rotors
- CE-marked Class II for IVF according to Medical Device Directive 93/42/EEC
- Rigorously tested, certified and validated for IVF
- CE-marked and MEA tested
- Produced under ISO 13485 with full lot traceability
- Certificates of conformity for your assurance on every lot
  - Sterile (SAL  $10^{-6}$ )
  - Non-pyrogenic (LAL test)
  - USP Class VI test
  - Release test results (MEA and HSSA)

**Certificate confirms:** Sterility (SAL  $10^{-6}$ ), non-pyrogenicity, USP Class VI test, and results from release tests (MEA and HSSA).

*Notes: Nunc IVF 11 mL Centrifuge Tubes are not available in the United States.*

### Nunc IVF 11 mL Centrifuge Tube

Cat. No.	Style	Capacity, mL	L x O.D., mm	Cap Type	Bottom Shape	No. per Pack	No. per Case
137860	Centrifuge	11	110 x 16	Plug	Conical	5	300





## ► Thermo Scientific Nunc 14 mL Round Bottom Tubes



**Nunc™ certified 14 mL Round Bottom Tubes are designed for critical cellular applications and meet the exacting requirements for consistently reliable, high-quality results during collection of oocytes.**

### details

#### Innovative features for enhanced results

- Optimized gas exchange with dual position vent/close cap
- Off-gas volatile organic compounds easily with breathable packaging
- Certificates of conformity available for every lot

#### Rigorously tested

- MEA tested
- Produced under ISO 13485 with full lot traceability
- Certificates of conformity for your assurance on every lot
  - Sterile (SAL  $10^{-6}$ )
  - Non-pyrogenic (LAL test)
  - USP Class VI test
  - Release test results (MEA)

**For research use only.**

### Nunc 14 mL Round Bottom Tubes

Cat. No.	Description	Material (tube/cap)	Cap Type	Airvent	Suggested Working Vol.	No. per Pack	No. per Case
150268	14 mL Round Bottom Tube	Polystyrene/Low-Density Polyethylene	Dual Function Closure	Vent/Close	14 mL	10	500

# CO<sub>2</sub> incubators

**Your cultures are valuable –  
often irreplaceable.**

**Surround them with an  
environment you can trust.**

More scientists worldwide rely on Thermo Scientific CO<sub>2</sub> incubators than any other brand. They deliver precisely what you need to achieve your cell culturing goals worry-free – with a choice of products based on direct-heat and water-jacket chamber construction:

- Optimal growth conditions, through advanced design features
- Proven contamination prevention, using 100% copper surfaces and HEPA filtration
- A wide range of volume capacities, ranging from 1.4 cu. ft. to 29 cu. ft.
- Ease of operation and maintenance



For more product information, go to:  
**[www.thermoscientific.com/co2](http://www.thermoscientific.com/co2)**



## ► Thermo Scientific Nunc 1.8 mL CryoTube



**Nunc™ 1.8 mL CryoTubes meet the exacting requirements of IVF testing, certification, and validation, providing consistently reliable, high-quality results during gamete and embryo storage.**

Optimize your frozen embryo transfer success rate with safe and convenient storage solutions for your precious samples. Cryopreservation offers multiple chances to achieve pregnancy from a single oocyte retrieval cycle.

### details

#### Innovative features for enhanced results

- Ensures extra safety for valuable samples with internally threaded caps and silicone gasket
- Provides large writing area for marking samples
- Certificates of conformity available for every lot

#### Rigorously tested, certified and validated for IVF

- CE-marked, FDA cleared and MEA tested
- Produced under ISO 13485 with full lot traceability
- Certificates of conformity for your assurance on every lot
  - Sterile (SAL10<sup>-6</sup>)
  - Non-pyrogenic (LAL test)
  - USP Class VI test
  - Release test results (MEA)

*Notes: Nunc IVF 1.8 mL CryoTubes are not available in the United States.*

#### Nunc IVF 1.8 mL Centrifuge Tube

Cat. No.	Style	Capacity, mL	L x O.D., mm	Material tube/cap	Cap Type	Bottom Shape	No. per Pack	No. per Carton	No. per Case
177280	Cryo	1.8	49 x 12.5	Polypropylene/Polypropylene	Cap, Internal Thread	Round	50	450	1800



# microplates

for drug discovery | 418-463

Superior performance in virtually every application.

The quality and breadth of the Thermo Scientific line of microplates, microplate accessories and microplate sealers are unmatched in the industry. Researchers around the world rely on our 55 years of experience manufacturing Thermo Scientific Nunc microplates, and regard Nunc™ as the quality standard by which all microplates are measured. Whether you're culturing individual cell lines or scaling up for high-throughput screening, or anything in between – there's a Nunc microplate for your needs.

The range of Thermo Scientific adhesive seals, heat seals and heat sealers offers reliable options for maintaining the integrity of your plate contents, allowing you to store your samples confidently. For added assurance in tracking stored samples, rely on Nunc custom barcoding to simplify your tracking and inventory management.

With so many variables in your research, don't let consumables get in the way of progress. Choose only Thermo Scientific products – the most reliable microplates and accessories available.

- For an online guide to help you select the best plate for your research, visit:

**[thermoscientific.com/plateguide](https://www.thermoscientific.com/plateguide)**

microplates for drug discovery



**sample** integrity





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## ► Thermo Scientific Nunc BioAssay Dishes Square



**Nunc™ Square BioAssay Dish is useful as an incubation chamber for *in-situ* hybridization and suitable for agar diffusion assays.**

Used for culturing of bacteria and fungi and also as a moisture chamber for incubation of Nunc MicroWell™ Plates

### details

- Optically-clear
- Large growth area
- Low profile design fits robotic instruments
- Designed for genomic screening and colony picking
- Untreated
- Sterile
- Supplied with lid

### Nunc BioAssay Dishes

Cat. No.	Description	Working Volume, mL	L x W x H, mm	Working Vol., mL	Surface Area	No. per Pack	No. per Case
240835	Standard Height BioAssay Dish	225	245 x 245 x 25	225	500 cm <sup>2</sup>	4	16
240845	Low Profile BioAssay Dish	215	241 x 241 x 20	215	478 cm <sup>2</sup>	5	20





## ► Thermo Scientific Nunc Rectangular Dishes



**Nunc™ Rectangular Dishes have ANSI standard dimensions and are optimized for robotics.**

The non-treated surface is ideal for molecular biology applications.

### details

#### Rectangular Dishes 1-, 4- and 8-well

- 1-well dish is ideal for HTS Petri dish applications
- 4- and 8-well dishes are ideal for assay compartmentalization, probe multiple gene sub-set
- 4-well dish holds four glass slides for storage

#### 1-Well Format

- Convenient plate format for cell culture
- HTS Petri dish applications

#### 4- and 8-Well Formats

- Assay compartmentalization
- Probe multiple gene subsets
- Wash Western blot strips
- 4-well dish holds four glass slides
- Useful in all areas of cell culture, including scale-up and cloning

**Ordering Information:** Customized bar coding is available.

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

#### Nunc Rectangular Dishes

Cat. No.	Total Vol., $\mu$ L	Wells	L x W, mm	Sterile	Lid	No. per Pack	No. Per Case
267060	90	1	128 x 86	Yes	Yes	10	100
267061	22	4	128 x 86	Yes	Yes	10	100
267062	11	8	128 x 86	Yes	Yes	10	100



## ► Thermo Scientific Nunc OmniTray



**Nunc™ OmniTrays are ideal for screening libraries, DNA hybridization, standard petri dish techniques and bacterial growth.**

### details

- Clear polystyrene has excellent optical properties making it ideal for optical measurements and colony counting
- Untreated polystyrene is hydrophobic and is suited for growth of suspension cultures that can proliferate and grow without attachment
- Untreated surfaces are ideal for adding coatings in your lab
- Cell Culture Treated: The Nunclon™ Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Optical clarity makes colonies easy to see
- Can be frozen at -20°C

### Nunc OmniTray acts as:

- Holder for membrane when dot blotting
- Container for hybridization and washing steps
- Storage container for membranes

**Recommended for:** Dot blotting, denaturation/hybridization/washing, bacterial growth, membrane storage.

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Nunc OmniTray

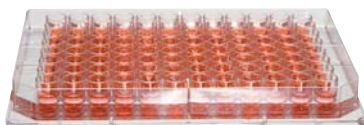
Cat. No.	Surface	Well Design	Color	Total Vol., $\mu$ L	Working Vol., mL	Sterile	Lid	No. per Pack	No. Per Case
140156*	Cell Culture	Rectangular	Clear	90	35	Yes	Yes	10	90
165218	Cell Culture	Rectangular	Clear	90	35	Yes	Yes	10	60
242811	Non-Treated	Rectangular	Clear	90	35	Yes	Yes	10	60
264728	Non-Treated	Rectangular	Clear	90	35	Yes	Yes	10	90

\* Enhanced rectangular area ideal for automated picking and viewing system

► For custom barcoded plates, visit  
[www.thermoscientific.com/barcodeconfigurator](http://www.thermoscientific.com/barcodeconfigurator)



## ► Thermo Scientific Nunc Edge 96-Well Plate



**The Nunc™ Edge plate has a unique design that minimizes plate evaporation.**

Fill each moat section with 1.7 mL sterile water or media; the large evaporation buffer zones eliminate well-to-well variability while dramatically reducing the overall evaporation rate to <2% after 7 days of incubation. In addition to the evaporation barrier, the Edge plate is engineered for optical superiority allowing your automated imaging systems to operate efficiently.

### details

- Clear polystyrene has excellent optical properties making it ideal for optical measurements
- Untreated polystyrene is hydrophobic and is suited for growth of suspension cultures that can proliferate and grow without attachment.
- Untreated surfaces are ideal for adding coatings in your lab
- Cell Culture Treated: The Nunclon Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Customized bar coding is available
- Working volume: 50-250 µL/well

### Reduced Edge Effect

- Virtually eliminates evaporation in lengthy incubations
- Use all 96 wells with fewer concerns of edge effect

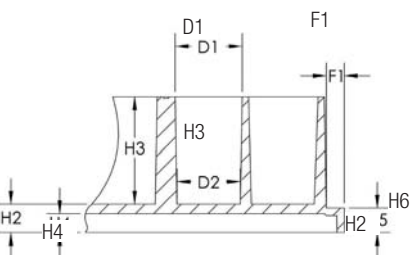
### Low Evaporation Permits Full-plate Results

- Unique design minimizes plate evaporation
- Large evaporative buffer zones eliminate well-to-well variability
- Overall plate evaporation rate reduced to <2% after seven days of incubation
- Perimeter moat can be filled with 1.7 mL sterile H<sub>2</sub>O or media
- Total well volume: 400 µL

### Optical Properties are Critical

- Clear plates are engineered for optical superiority
- Low background fluorescence
- Extreme well flatness
- Ideal for image-based high content applications like measuring primary neuron cultures

**Compliance:** All microplates manufactured by Nunc meet the recommendation of American National Standards Institute (ANSI).



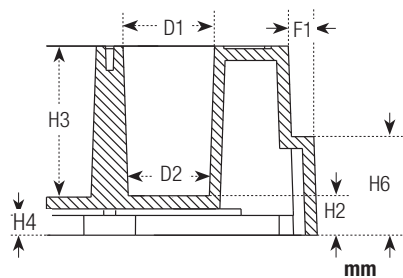
		mm
<b>Total height of plate</b>		<b>14.4</b>
H2	Vertical distance from inside well bottom to resting plane	3.0
H3	Inside depth of well	11.4
H4	Vertical distance from external well bottom to resting plane	2.0
H5	Height of flange on the short side	2.6
D1	Well diameter, top	7.1
D2	Well diameter, bottom	6.7
F1	Depth of flange	1.9

### Nunc Edge 96-Well Plate

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
167311	Cell Culture	96 F	Clear	400	Yes	No	10	160
167314	Cell Culture	96 F	Clear	400	Yes	Yes	1	50
267312	Non-treated	96 F	Clear	400	No	Yes	10	160
267313	Non-treated	96 F	Clear	400	Yes	Yes	1	50

► For custom barcoded plates, visit  
[www.thermoscientific.com/barcodeconfigurator](http://www.thermoscientific.com/barcodeconfigurator)

## ► Thermo Scientific Nunc MicroWell 96-Well Microplates



	mm
<b>Total height of plate</b>	<b>14.4 ± 0.2</b>
H2 Vertical distance from inside well bottom to resting plane	3.0
H3 Inside depth of well	11.4
H4 Vertical distance from external well bottom to resting plane	1.9
H5 Height of flange on the short side	2.4
H6 Height of flange on the long side	7.4
D1 Well diameter, top	7.0
D2 Well diameter, bottom	6.2
F1 Depth of flange	1.7

**Nunc™ Flat Bottom 96-well polystyrene plates are optimized for robotics, automated readers and liquid handling systems.**

96-well microplates are used for antibiotic screens, cell-based assays and screening compounds. The flat bottom shape is ideal for microscopic and optical measurements. Our plates are high quality for consistent and reliable results.

### details

- Clear polystyrene has excellent optical properties making it ideal for optical measurements
- Untreated polystyrene is hydrophobic and is suited for growth of suspension cultures that can proliferate and grow without attachment
- Untreated surfaces are ideal for adding coatings in your lab
- Cell Culture Treated: The Nunclon™ Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Plates are optimized for robotics, plate readers and liquid handlers
- Working volume: 50-250 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Nunc MicroWell 96-Well Microplates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
145387	Low Cell Binding	96 F	Clear	400	irradiated	Yes	1	8
152038	Collagen I	96 F	Clear	400	--*	Yes	5	20
152039	Poly-D-Lysine	96 F	Clear	400	--*	Yes	5	20
156545	Cell Culture	96 F	Clear	400	Yes	No	10	180
161093	Cell Culture	96 F	Clear	400	Yes	Yes	10	160
167008	Cell Culture	96 F	Clear	400	Yes	Yes	1	50
168055	Cell Culture	96 F	Clear	400	Yes	No	1	50
174897	UpCell	96 F	Clear	400	Yes	Yes	1	8
174907	HydroCell	96 F	Clear	400	Yes	Yes	1	8
243656	Non-Treated	96 F	Clear	400	Yes	Yes	6	108
256510	Non-Treated	96 F	Clear	400	Yes	No	10	180
260836	Non-Treated	96 F	Clear	400	No	No	10	180
260844	Non-Treated	96 F	Clear	400	No	No	10	180
260860	Non-Treated	96 F	Clear	400	Yes	Yes	10	180
260887	Non-Treated	96 F	Clear	400	Yes	Yes	10	160
260895	Non-Treated	96 F	Clear	400	No	Yes	10	160
266120	Non-Treated	96 F	Clear	400	Yes	Yes	25	100
269620	Non-Treated	96 F	Clear	400	No	No	5	60
269787	Non-Treated	96 F	Clear	400	Yes	No	1	50

\* Produced in a clean environment



## ► Thermo Scientific Nunc F96-MicroWell Black and White Polystyrene Plate



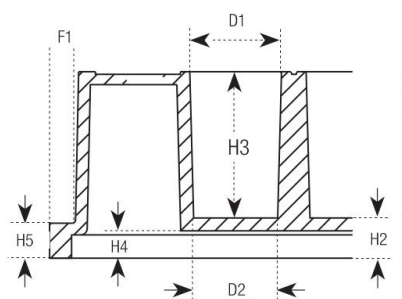
**Nunc™ 96-well black and white polystyrene plates are optimized for robotics, plate readers and liquid handling systems.**

Our plates are high quality for consistent and reliable results.

### details

- Background, autofluorescence and crosstalk are improved when you use Nunc Black or White microplates
- Black microplates are recommended for fluorescence measurements; with minimum back-scattered light and background fluorescence
- White microplates are recommended for luminescence measurements; with maximum reflection and minimal autoluminescence
- Cell Culture Treated: The Nunclon™ Delta Cell Culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Working volume range: 50 to 250 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI) (ANSI/SBS 1-2004).



	mm
<b>Total height of plate</b>	<b>14.5 ± 0.3</b>
H2 Vertical distance from inside well bottom to resting plane	3.6
H3 Inside depth of well	11.2
H4 Vertical distance from external well bottom to resting plane	2.1
H5 Height of flange	2.7
D1 Well diameter, top	7.05
D2 Well diameter, bottom	6.55 ± 0.1
F1 Depth of flange	2.0

### Nunc F96-MicroWell Black and White Polystyrene Plate

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
136101	Cell Culture	96 F	White	400	Yes	Yes	1	50
136102	Cell Culture	96 F	White	400	Yes	Yes	10	160
137101	Cell Culture	96 F	Black	400	Yes	Yes	1	50
137103	Cell Culture	96 F	Black	400	Yes	Yes	10	160
236105	Non-Treated	96 F	White	400	Yes	Yes	1	50
236107	Non-Treated	96 F	White	400	Yes	Yes	10	160
236108	Non-Treated	96 F	White	400	No	No	10	180
237105	Non-Treated	96 F	Black	400	Yes	Yes	1	50
237107	Non-Treated	96 F	Black	400	Yes	Yes	10	160
237108	Non-Treated	96 F	Black	400	No	No	10	180



## ► Thermo Scientific Nunc 96-Well Polystyrene Round Bottom Microwell Plates



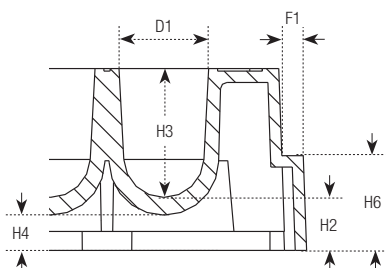
**Nunc™ 96-well round bottom polystyrene plates are optimized for robotics, automated readers and liquid handling systems.**

96-well round (U) bottom microplates are ideal for agglutination assays.

### details

- Clear polystyrene has excellent optical properties making it ideal for optical measurements
- Untreated polystyrene is hydrophobic and is suited for growth of suspension cultures that can proliferate and grow without attachment
- Untreated surfaces are ideal for adding coatings in your lab
- Cell Culture Treated: The Nunclon™ Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Plates are optimized for robotics, plate readers and liquid handlers
- Working volume: 50 to 250 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).



	mm
<b>Total height of plate</b>	<b>14.5 ± 0.1</b>
H2 Vertical distance from inside well bottom to resting plane	4.2
H3 Inside depth of well	10.2
H4 Vertical distance from external well bottom to resting plane	2.8
H5 Height of flange on the short side	2.4
H6 Height of flange on the long side	7.5
D1 Well diameter, top	7.1
D2 Well diameter, bottom	Round bottom
F1 Depth of flange	1.7

### Nunc 96-Well Polystyrene Round Bottom Microwell Plates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
143761	Cell Culture	96 U	Clear	300	Yes	No	1	50
145399	Low Cell Binding	96 U	Clear	300	irradiated	Yes	1	8
163320	Cell Culture	96 U	Clear	300	Yes	Yes	1	50
168136	Cell Culture	96 U	Clear	300	Yes	Yes	10	160
174908	HydroCell	96 U	Clear	300	Yes	Yes	1	8
262146	Non-Treated	96 U	Clear	300	No	No	135	135
262162	Non-Treated	96 U	Clear	300	Yes	No	1	50
268152	Non-Treated	96 U	Clear	300	No	No	10	180
268200	Non-Treated	96 U	Clear	300	Yes	Yes	10	160



## ► Thermo Scientific Nunc 96-Well Polystyrene Conical Bottom Microwell Plates



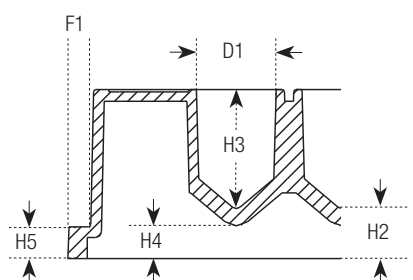
**Nunc™ 96-well conical bottom polystyrene plates are optimized for robotics, automated readers and liquid handling systems.**

96-well conical (V) bottom microplates are ideal for sample recovery. Applications include: antibiotic screens, serological tests, storing, screening compounds and DNA libraries

### details

- Clear polystyrene has excellent optical properties making it ideal for optical measurements
- Plates are optimized for robotics, plate readers and liquid handlers
- Customized bar coding is available
- Working volume range: 50 to 250 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards (ANSI).



	mm
<b>Total height of plate</b>	<b>14.4 ± 0.1</b>
H2 Vertical distance from inside well bottom to resting plane	4.6
H3 Inside depth of well	9.8
H4 Vertical distance from external well bottom to resting plane	2.8
H5 Height of flange	2.7
D1 Well diameter, top	6.8
D2 Well diameter, bottom	V-shaped
F1 Depth of flange	1.2

### Nunc 96-Well Polystyrene Conical Bottom Microwell Plates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. per Case
249570	Non-Treated	96 V	Clear	300	No	No	10	180
249662	Non-Treated	96 V	Clear	300	Yes	No	1	50
249935	Non-Treated	96 V	Clear	300	Yes	Yes	10	80
249940	Non-Treated	96 V	Clear	300	Yes	No	10	80
249952	Non-Treated	96 V	Clear	300	Yes	Yes	10	160
277143	Non-Treated	96 V	Clear	300	Yes	Yes	1	50

► For custom barcoded plates, visit  
[www.thermoscientific.com/barcodeconfigurator](http://www.thermoscientific.com/barcodeconfigurator)



## ► Thermo Scientific Nunc 96-Well UV Microplate



**Nunc™ UV transparent 96-well microplates are ideal for DNA and protein quantitation in 260 nm and 280 nm range.**

The 96-Well format allows a higher throughput of sample screening compared to cuvettes.

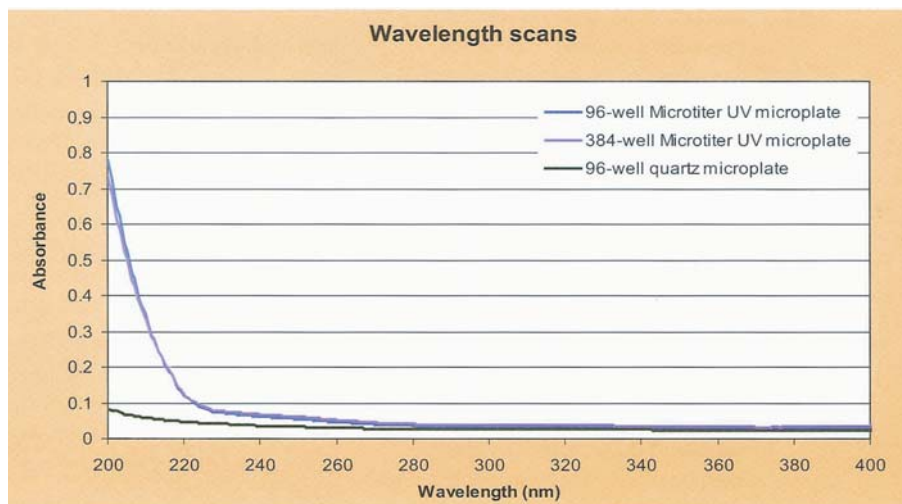
### details

- Certified RNase and DNase free; non-pyrogenic
- Low background absorbance
- Measure protein concentrations at 280 nm
- Temperature range: -80°C to +40°C
- Working volume: 25 to 340 µL/well

**Compliance:** This Thermo Scientific microplate meets the recommendation of American National Standards Institute (ANSI).

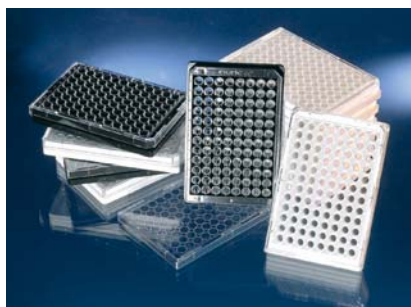
### Nunc 96-Well UV Microplate

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
8404	UV	96 F	Clear	392	No	No	10	40





## ► Thermo Scientific Nunc MicroWell 96-Well Optical-Bottom Plates with Polymer Base



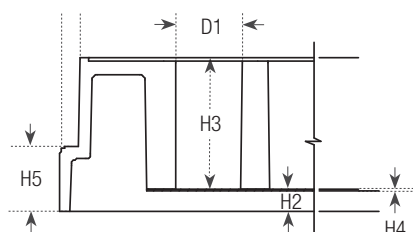
**Nunc™ 96-Well Optical Bottom plates have a solid polystyrene black or white upper structure with a polystyrene film on the bottom of the plate.**

The plates are optimized for fluorescence and luminescence in cell culture and microscopic applications.

White or black polystyrene upper structure with polymer bottom plates combine the optical clarity of virgin crystalline polystyrene with optimal surface for a wide range of HTS applications.

### details

- Black microplates are recommended for fluorescence measurements with minimum back-scattered light and background fluorescence
- White microplates are recommended for luminescence measurements; with maximum reflection and minimal autoluminescence
- Polymer base plate
- Working range, 50-200 µL/well
- Customized bar coding is available



		mm
	<b>Total height of plate</b>	<b>14.9</b>
H2	Vertical distance from inside well bottom to resting plane	2.2
H3	Inside depth of well	12.1
H4	Polystyrene film	0.25
H5	Height of flange	6.2
D1	Well diameter	6.5

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Nunc MicroWell 96-Well Optical-Bottom Plates with Polymer Base

Cat. No.	Surface	Well Design	Color	Bottom Plate	Total Vol., µL	Sterile	Lid	No. per Pack	No. per Case
152028*	Poly-D-Lysine	96 F	White	Polymer	400	--*	Yes	5	20
152036*	Collagen I	96 F	Black	Polymer	400	--*	Yes	5	20
152037*	Poly-D-Lysine	96 F	Black	Polymer	400	--*	Yes	5	20
152040*	Collagen I	96 F	White	Polymer	400	--*	Yes	5	20
165305	Cell Culture	96 F	Black	Polymer	400	Yes	Yes	10	30
165306	Cell Culture	96 F	White	Polymer	400	Yes	Yes	10	30
265301	Non-treated	96 F	Black	Polymer	400	No	No	10	30
265302	Non-treated	96 F	White	Polymer	400	No	No	10	30
4924MTX	Non-treated	96 F	White	Polymer	300	No	No	20	80
4925MTX	Medium Binding	96 F	White	Polymer	300	Irradiated	Yes	20	80
4928MTX	Medium Binding	96 F	Black	Polymer	300	No	No	20	80
4929MTX	Medium Binding	96 F	Black	Polymer	300	Irradiated	Yes	20	80
4937MTX	Cell Culture	96 F	White	Polymer	370	Irradiated	No	10	80
4938MTX	Cell Culture	96 F	White	Polymer	370	Irradiated	Yes	10	80
4939MTX	Cell Culture	96 F	Black	Polymer	370	Irradiated	No	10	80
4940MTX	Cell Culture	96 F	Black	Polymer	370	Irradiated	Yes	10	80

\* Produced in a clean environment

## ► Thermo Scientific Nunc MicroWell 96-Well Optical-Bottom Plates with Coverglass Base



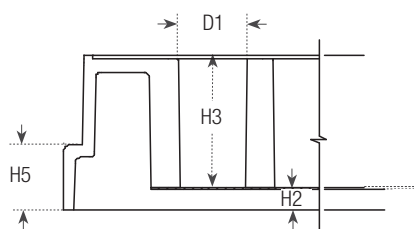
**Nunc™ Optical Bottom plates have a solid polystyrene black or white upper structure with a coverglass plate bottom.**

The plates are optimized for fluorescence and luminescence in cell culture and microscopic applications. The coverglass bottom has minimum light scatter and low autofluorescence, ensuring accurate results due to higher signal-to-noise ratio.

### details

- Black microplates are recommended for fluorescence measurements; with minimum back-scattered light and background fluorescence
- White microplates are recommended for luminescence measurements; with maximum reflection and minimal autoluminescence
- Culture area, 0.32 cm<sup>2</sup>
- Cell culture surface is ideal for cell-based assays
- CC<sup>2</sup> surface modification closely mimics Poly-D-Lysine and is superior for attachment and growth of fastidious cells

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).



	mm
<b>Total height of plate</b>	<b>14.9</b>
H2 Vertical distance from inside well bottom to resting plane	2.2
H3 Inside depth of well	12.1
H5 Height of flange	6.2
D1 Well diameter	6.5

### Nunc MicroWell 96-Well Optical-Bottom Plates with Coverglass Base

Cat. No.	Surface	Well Design	Color	Bottom Plate	Sterile	Lid	No. per Pack	No. Per Case
160376	CC <sup>2</sup>	96 F	Black	No. 1.5 Coverglass	Yes	Yes	6	30
164588	Cell Culture	96 F	Black	No. 1.5 Coverglass	Yes	Yes	6	30
164590	Cell Culture	96 F	White	No. 1.5 Coverglass	Yes	Yes	6	30
265300	Non-treated	96 F	Black	No. 1.5 Coverglass	No	No	5	30



## ► Thermo Scientific Nunc 96-Well Polypropylene MicroWell Plates



**Nunc™ 96-well polypropylene plates are the ideal storage plate because polypropylene has lower binding characteristics so proteins or DNA will not bind and allows complete sample recovery.**

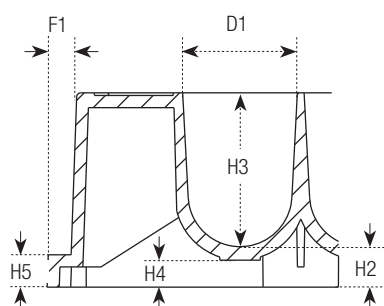
Withstands temperatures from -80°C to +121°C; available in a variety of colors for quick identification of your storage plates.

These microplates have shared-wall technology, which increases well volume and widens cells to improve mixing.

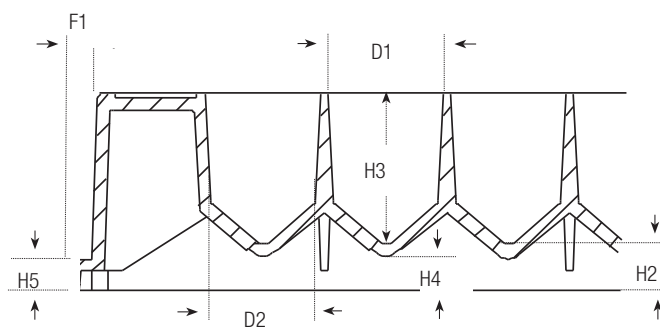
### details

- Wider wells and rounded bottom improve mixing
- Conical bottom wells for optimal sample recovery
- Excellent chemical resistance
- Black and white plates are available for fluorescent- and luminescent-based applications
- Low-binding polypropylene for homogeneous assays and storage
- Ideal as collection plate for Nunc Filter Plates
- U96-well Plates – working volume range: 20 to 450 µL/well
- V96-well Plates – working volume range: 10 to 400 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).



	mm
<b>Total height of plate</b>	<b>14.5 ± 0.3</b>
H2 Vertical distance from inside well bottom to resting plane	3.1
H3 Inside depth of well	11.2
H4 Vertical distance from external well bottom to resting plane	2.0
H5 Height of flange on the short side	2.4
D1 Well diameter, top	8.5
F1 Depth of flange	1.7



	mm
<b>Total height of plate</b>	<b>14.4 ± 0.1</b>
H2 Vertical distance from inside well bottom to resting plane	3.4
H3 Inside depth of well	11.0
H4 Vertical distance from external well bottom to resting plane	2.5
H5 Height of flange on the short side	2.3
H6 Height of flange on the long side	7.5
D1 Well diameter, top	8.5
D2 Well diameter, bottom	V-bottom
F1 Depth of flange	1.7





## Nunc 96-Well Polypropylene MicroWell Plates

Cat. No.	Surface	Well Design	Color	Total Vol., $\mu$ L	Sterile	Lid	No. per Pack	No. per Case
249943	Non-Treated	96 V	Red	450	No	No	20	120
249944	Non-Treated	96 V	Natural	450	No	No	20	120
249945	Non-Treated	96 V	Black	450	No	No	20	120
249946	Non-Treated	96 V	Natural	450	Yes	No	20	120
249947	Non-Treated	96 V	Yellow	450	No	No	20	120
249949	Non-Treated	96 V	White	450	No	No	20	120
249950	Non-Treated	96 V	Blue	450	No	No	20	120
267245	Non-Treated	96 U	Natural	500	No	No	10	120
267334	Non-Treated	96 U	Natural	500	Yes	No	10	120
267342	Non-Treated	96 U	Black	500	No	No	10	120
267350	Non-Treated	96 U	White	500	No	No	10	120
267369	Non-Treated	96 U	Red	500	No	No	10	120
267385	Non-Treated	96 U	Blue	500	No	No	10	120
267407	Non-Treated	96 U	Yellow	500	No	No	10	120
442587*	Non-Treated	96 V	Natural	450	No	No	5	60
95040410	Non-Treated	96 Square	Natural	500	No	No	5	50

\* Pinch Bar Design

► For custom barcoded plates, visit  
[www.thermoscientific.com/barcodeconfigurator](http://www.thermoscientific.com/barcodeconfigurator)



## ► Thermo Scientific Nunc 1.3 and 2.0 mL DeepWell Plates with Shared-Wall Technology



Nunc round-well plates



Nunc square-well plates

Nunc™ DeepWell plates with shared-wall technology are ideal for sample collection, storage, combinatorial chemistry and library applications, and are resistant to most chemicals, solvents and alcohols used in combinatorial chemistry.

Shared-wall technology provides increased well volume optimizing storage capacity and improved mixing.

### details

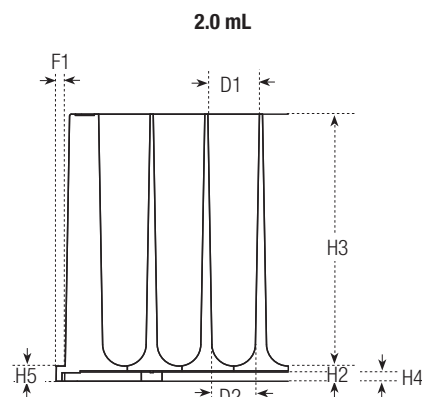
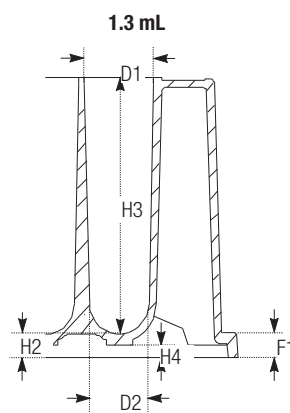
- Ideal as a collection plate for Nunc Filter Plates
- Storage plate for compounds, samples or biomolecules
- Optimized for bacterial and yeast growth
- Polypropylene
- Round-bottom wells reduce liquid retention
- Widely used for bacteria and yeast growth
- Natural color
- Resistant to most chemicals, solvents, and alcohols used in combinatorial chemistry

### Working volumes

- Cat. Nos. 260251 and 150141: 50-100 µL/well
- Cat. Nos. 278743 and 278752: 50-1900 µL/well

**Recommended for:** Sample collection; storage; combinatorial chemistry; library applications; bacterial and yeast growth; collection plates for Nunc Filter Plates.

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).



	mm		mm
	<b>31.6</b>		<b>44.0</b>
H2	2.5	H2	2.5
H3	29.1	H3	41.5
H4	1.4	H4	1.5
D1	8.5	H5	2.5
D2	8.4	D1	8.5
F1	2.5	D2	6.0
		F1	1.5

**Nunc 1.3 and 2.0 mL DeepWell Plates with Shared-Wall Technology**

Cat. No.	Surface	Well Design	Color	Total Vol., $\mu$ L	Sterile	Lid	No. per Pack	No. per Case
260251	Non-Treated	96 U	Natural	1.3	Yes	No	5	50
260252	Non-Treated	96 U	Natural	1.3	No	No	5	50
278743	Non-Treated	96 U	Natural	1.3	Yes	No	1	60
278752	Non-treated	96 U	Natural	1.3	No	No	5	60
95040452	Non-Treated	96 Square	Natural	2	No	No	5	50
95040462	Non-Treated	96 Square	Natural	2	Yes	No	5	50





## ► Thermo Scientific Nunc 96-Deep Well Polystyrene Plates



**Nunc™ 96-Deep Well Polystyrene Plates'** untreated surface provides uniform surface properties, making them ideal for cloning and replication assays.

The round bottom is ideal for agglutination assays and sample collection.

### details

- Optimized for robotics and liquid handling systems
- Round-bottom wells for optimal sample recovery
- Untreated surface
- Sealable with well caps and sealing tape
- Working range: 50 to 900 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Nunc 96-Deep Well Polystyrene Plates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	No. per Pack	No. Per Case
278605	Non-Treated	96 U	Clear	1.0	No	4	32
278606	Non-Treated	96 U	Clear	1.0	Yes	4	32

## ► Thermo Scientific Nunc 96-Well Filter Plates



**Nunc™ Filter Plates are optimized for efficient purification of high-quality plasmid DNA or PCR products.**

Designed specifically for high-throughput sample processing, these 96-well filter plates are made of polypropylene offering chemical resistance and mechanical strength; ideal for DNA plasmid preparations and PCR cleanups.

### details

- Designed specifically for high-throughput sample processing
- Suitable for vacuum, filtration, centrifugation or positive pressure techniques
- Polyethylene terephthalate (PET) frit in fritted plate has 20 µm pore size
- Shared wall configuration gives reduced plate height, wider wells for faster processing, higher yields and less clogging
- Purified DNA is suitable for downstream applications such as sequencing and restriction digestion
- Glass Fiber plate has PET frit and two layers of glass fiber membrane for binding DNA

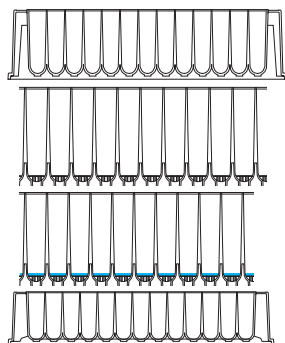
**Recommended for:** Protein purification, lysate clarification, general filtration.

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Flow diagram for plasmid DNA purification

#### Procedure:

Figure 1.  
Procedure on  
how to use  
Nunc Filter  
Plates for cost  
effective DNA  
purification.



- Grow E. Coli cells in a sterile 2 mL DeepWell Plate (Cat. No. 278743). (overnight)
- Lyse bacteria and neutralize lysate. (15 min.)
- Clarify plasmid DNA with Fritted Filter Plate (Cat. No. 278011). (1 min.)
- Bind plasmid DNA to Glass Fiber Filter Plate (Cat. No. 278010). (3 min.)
- Wash and dry membrane. (8 min.)
- Elute pure plasmid DNA with TE into 1 mL reception DeepWell Plate (Cat. No. 260252). (12 min.)

### Nunc 96-Well Filter Plates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Working Vol., µL	Frit Size, µm	Sterile	No. per Pack	No. Per Case
278010	Non-Treated	96-well Glass Fiber Filter (Binding) Plate	Natural	1.3	1.0	20*	No	5	50
278011	Non-Treated	96-Fritted Well Deep Well Plate	Natural	1.3	1.0	20	No	5	50
278012	Non-Treated	96-Unfritted well Deep Well Plate	Natural	1.3	1.0		No	5	50

\* Has two layers of glass fiber membrane on top of PET frit

# microplate instrumentation

## **The most complete solutions for all of your laboratory needs.**

Thermo Scientific microplate instruments offer precise results and efficient performance, making them ideal for cell biology, molecular biology and immunology applications in the fields of cancer research, drug development, proteomics and genomics.

- Flexible, easy-to-use microplate washers support routine and varied research applications
- A choice of dedicated and multi-technology microplate readers offers a wide variety of applications
- Superior microplate incubator shakers deliver accurate temperature control and efficient orbital shaking
- Designed for ease of use, our microplate dispensers offer high-speed, continuous dispensing of various liquids



For more product information, go to:  
[www.thermoscientific.com/mpi](http://www.thermoscientific.com/mpi)



## ► Thermo Scientific Nunc 96-Well Cap Mats



**Nunc™ 96-Well Cap Mats for polypropylene plates will protect well contents during short-term or long-term storage of chemicals or compounds.**

### details

- Chemically resistant, pierceable, withstand low temperature to -80°C
- Pre-slit silicone well caps permit a pipette tip or probe to enter the well without damage to the cap
- The variety of colors is for quick identification of storage plates
- Silicone caps with pre-slit are solvent resistant, should not be subjected to 100% DMSO

**Ordering Information:** Sterile mats are individually wrapped.

**Notes:** 96-well polypropylene DeepWell plates with “Shared Wall” technology also fit standard-height polypropylene 96-well microwell plates. 276011 Preslit silicone caps can be pierced repeatedly. Do not use pre-slit silicone with 100% DMSO.

### Nunc 96-Well Cap Mats

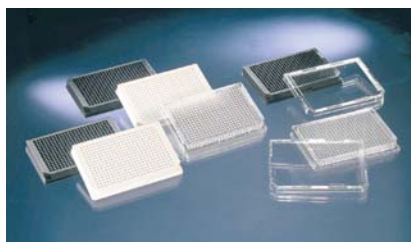
Cat. No.	Well	Under Well Shape	Pierceable	Slit	Color	Sterile	No. per Pack	No. Per Case
276000**	96	Round	Pierceable*	Not preslit	Natural	Yes	1	50
276002**	96	Round	Pierceable*	Not preslit	Natural	No	5	50
276003**	96	Round	Pierceable*	Not preslit	Yellow	No	5	50
276004**	96	Round	Pierceable*	Not preslit	Red	No	5	50
276005**	96	Round	Pierceable*	Not preslit	Blue	No	5	50
276011**	96	Round	Pierceable*	Preslit	Natural	No	10	50
4410MTX	96	Round	No	Not preslit	Natural	No	100	100
4411-11	96	Round	No	Not preslit	Natural	Yes	10	10
4412-11	96	Round	No	Not preslit	Natural	No	10	10
4413-11	96	Round	No	Not preslit	Natural	Yes	240	240
4414-11	96	Round	No	Not preslit	Natural	Yes	240	240
4415MTX	96	Round	No	Not preslit	Natural	No	240	240
4416MTX	96	Round	No	Not preslit	Natural	Yes	240	240
4420MTX	96	Square	No	Not preslit	Natural	No	100	100
4421MTX	96	Square	No	Not preslit	Natural	No	10	10
4422MTX	96	Square	No	Not preslit	Natural	Yes	10	10
4430-11	96	Round	No	Not preslit	Natural	No	100	100
4431-11	96	Round	No	Not preslit	Natural	No	10	10
4432-11	96	Round	No	Not preslit	Natural	Yes	10	10
9503230	96	Square	Pierceable*	Not preslit	Natural	No	5	50
9503233	96	Square	Pierceable*	Not preslit	Natural	Yes	1	25

\* Pierceable by hypodermic

\*\* For shared-wall plates



## ► Thermo Scientific Nunc 384-Well Clear Polystyrene Plates, Cell Culture Treated and Non-Treated Surfaces

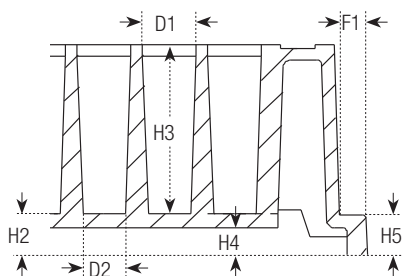


Nunc™ 384-well polystyrene plates are optimized for robotics, plate readers and liquid handling systems. 384-well microplates allow sample and reagent volume reduction providing cost savings and allowing more samples to be screened.

Nunc 384-well polystyrene plates have rounded square-well geometry, eliminating wicking.

### details

- Clear polystyrene has excellent optical properties making it ideal for optical measurements
- Untreated polystyrene is hydrophobic and is suited for growth of suspension cultures that can proliferate and grow without attachment
- Untreated surfaces are ideal for adding coatings in your lab
- Cell Culture Treated: The Nunclon™ Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Flexible working volumes: 10-100 µL



		mm
	<b>Total height of plate</b>	<b>14.4 ± 0.25</b>
H2	Vertical distance from inside well bottom to resting plane	2.6
H3	Inside depth of well	11.7
H4	Vertical distance from external well bottom to resting plane	1.7
H5	Height of flange	2.7
D1	Well diameter, top	3.7
D2	Well diameter, bottom	2.7
F1	Depth of flange	1.9



Pinchbar Design

**Compliance:** Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Nunc 384-Well Clear Polystyrene Plates, Cell Culture Treated and Non-Treated Surfaces

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
164610*	Cell culture	384 F	Clear	120	Yes	Yes	10	30
164564*	Cell culture	384 F	Clear	120	Yes	Yes	10	30
164555*	Cell culture	384 F	Clear	120	Yes	Yes	25	100
164688*	Cell culture	384 F	Clear	120	Yes	Yes	10	30
242757	Non-treated	384 F	Clear	120	Yes	Yes	10	30
242765	Non-treated	384 F	Clear	120	Yes	Yes	1	30
262160	Non-treated	384 F	Clear	120	No	No	25	100
262260	Non-treated	384 F	Clear	120	No	No	25	100
262360	Non-treated	384 F	Clear	120	No	No	25	100
265202	Non-treated	384 F	Clear	120	Yes	Yes	25	100
265203	Non-treated	384 F	Clear	120	Yes	No	25	100

\*Certified



## ► Thermo Scientific Nunc 384-Well Shallow Well Standard Height Clear Plates



Nunc 384-well shallow well standard height clear plates



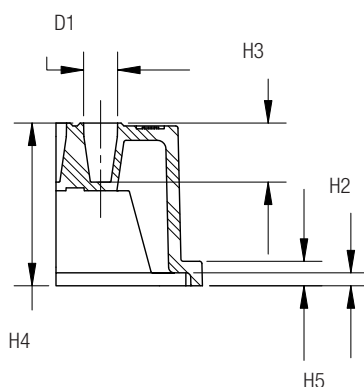
**Nunc™ 384-well shallow well standard height clear polystyrene plates provide cost savings in samples and reagents; by reducing the total well volume to 25  $\mu$ L.**

The standard height of the plate allows you to use automation without making adjustments to robotics, plate readers or liquid handlers.

### details

- Untreated polystyrene is hydrophobic and suited for growth of suspension cultures that can proliferate and grow without attachment
- Untreated surfaces are ideal for adding coatings in your lab
- Working volume: 2–20  $\mu$ L/well
- 25  $\mu$ L total volume saves reagents
- Clear polystyrene has excellent optical properties making it ideal for optical measurements
- Black microplates are recommended for fluorescence measurements, with minimum back-scattered light and background fluorescence
- White microplates are recommended for luminescence measurements, with maximum reflection and minimal autoluminescence

**Compliance:** Nunc microplates meet the recommendation of American National Standards Institute (ANSI).



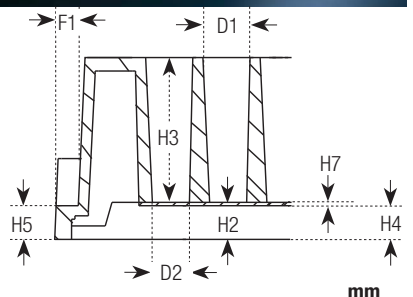
		mm
<b>Total height of plate:</b>		<b>14.35</b>
H2	vertical distance from stacking rim to resting plane	1.14
H3	Inside depth of well	5.21
H4	Vertical distance from external well bottom to resting plane	8.4
5	Height of flange	2.16
D1	Well diameter, top	0.3

### Nunc 384-Well ShallowWell Standard Height Plates

Cat. No.	Surface	Well Design	Color	Total Vol., $\mu$ L	Sterile	Lid	No. per Pack	No. Per Case
164701	Cell culture	384 F	Clear	25	Yes	Yes	25	100
264704	Non-treated	384 F	Clear	25	No	No	25	100
264705	Non-treated	384F	Black	25	No	No	25	100
264706	Non-treated	384F	White	25	No	No	25	100
264705	Non-treated	384 U	Black	25	No	No	25	



## ► Thermo Scientific Nunc 384-Well Optical Bottom Plates



	mm
<b>Total height of plate</b>	<b>14.4 ± 0.25</b>
H2 Vertical distance from inside well bottom to resting plane	2.7
H3 Inside depth of well	11.6
H4 Vertical distance from external well bottom to resting plane	2.5
H5 Height of flange	2.7
H7 Bottom thickness	0.3
D1 Well diameter, top	3.7 x 3.7
D2 Well diameter, bottom	2.9 x 2.9
F1 Depth of flange	1.8

**Nunc™ 384-Well Optical Bottom Plates are ideal for microscopic applications.**

The black microplates are recommended for fluorescence measurements; with minimum back-scattered light and background fluorescence. White microplates are recommended for luminescence measurements, offering maximum reflection and minimal autoluminescence.

Rounded-square wells provide maximum access for dispensers and readers.

### details

- Poly- D-Lysine and Collagen coating is ideal for cells with low adherence or growth – the uniform coating creates a positive charge on the surface that ensures cell attachment, growth and differentiation.
- Cell Culture Treated: The Nunclon Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth
- Untreated polystyrene is hydrophobic and is suited for growth of suspension cultures that can proliferate and grow without attachment and are ideal for adding coating in your own lab
- Polystyrene upper structure (available in black or white) with either a #1.5 cover glass or polystyrene base
- Working volume: 10 to 120 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Nunc 384-Well Optical Bottom Plates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
142761	Cell Culture	384 F	Black	120	Yes	Yes	10	30
142762	Cell Culture	384 F	White	120	Yes	Yes	10	30
152029	Poly-D-Lysine	384 F	Black	120	No	Yes	10	30
152041	Collagen I	384 F	Black	120	No	Yes	10	30
164586*	Cell Culture	384 F	Black	120	Yes	No	6	30
164730	Cell Culture	384 F	Black	120	Yes	No	10	30
240074*	Non-Treated	384 F	Black	120	No	No	5	30
242763	Non-Treated	384 F	White	120	No	No	10	30
242764	Non-Treated	384 F	Black	120	No	No	10	30
4321MTX	Medium Binding	384 F	White	120	No	No	10	80
4322MTX	Medium Binding	384 F	White	120	Irradiated	No	10	80
4323MTX	Medium Binding	384 F	Black	120	No	No	10	80
4324MTX	Medium Binding	384 F	Black	120	Irradiated	No	10	80
4329MTX	Cell Culture	384 F	White	120	Irradiated	No	10	80
4330-11	Cell Culture	384 F	White	120	Irradiated	No	10	80
4331-11	Cell Culture	384 F	Black	120	Irradiated	No	10	80
4332MTX	Cell Culture	384 F	Black	120	Irradiated	No	10	80

\*1.5 Coverglass

## ► Thermo Scientific Nunc 384-Well Conical Bottoms Polypropylene Plates



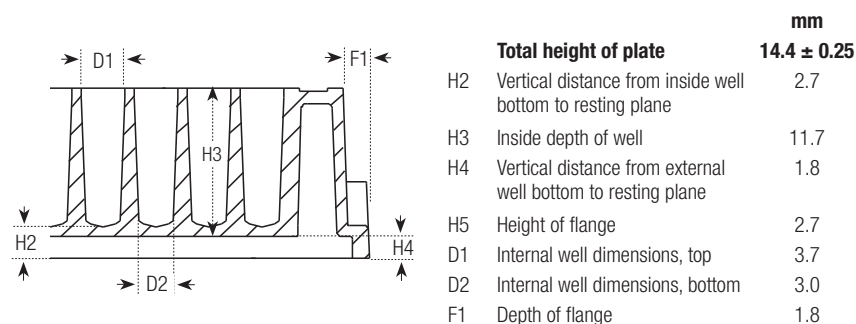
**Nunc™ 384-well polypropylene plates provide cost savings when storing compounds for small volume applications.**

Polypropylene is the ideal storage plate because it has a lower binding capacity so proteins or DNA will not bind, allowing complete sample recovery. Withstands temperatures from -80°C to +121°C. Offered in a variety of colors for quick identification of your storage plates.

### details

- Conical Wells offer optimal sample recovery
- Square rounded wells minimize wicking (capillary action)
- The variety of colors is for quick identification of storage plates
- Chemically resistant to DMSO
- Round bottom improves mixing
- U384-Well Plates working volume range: 10-100 µL/well
- V384-Well Plates working volume range: 4-120 µL/well

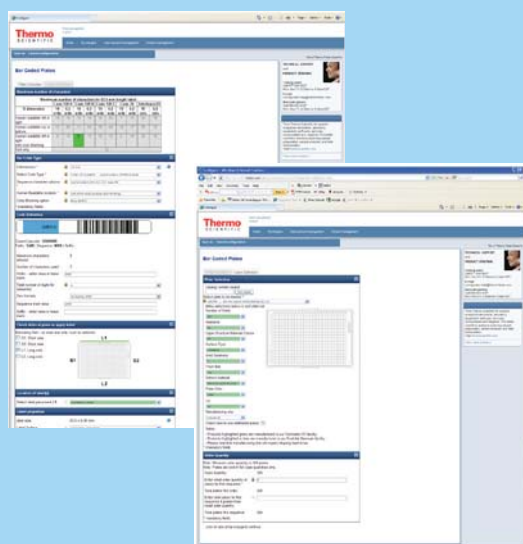
**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).



### Nunc 384-Well Conical Bottom Polypropylene Plates

Cat. No	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
264573	384 U	Natural	120	No	No	20	120
264574	384 U	Natural	120	Yes	No	20	120
264575	384 U	White	120	No	No	20	120
264576	384 U	Black	120	No	No	20	120
264579	384 U	Blue	120	No	No	20	120
264675	384 U	White	120	No	No	20	120
4305MTX	384 V	White	145	Yes	No	10	80
4306MTX	384 V	Black	145	Yes	No	10	80
4307MTX	384 V	White	145	No	No	10	80
4308MTX	384 V	Black	145	Yes	No	10	80
4309MTX	384 V	Natural	145	Yes	No	10	80
4312MTX	384 V	Natural	145	No	No	10	80

# barcode configurator



**Simplify sample tracking using  
Thermo Scientific Nunc Microplates  
with custom barcodes created by the  
Nunc™ Barcode Configurator.**

Barcodes provide a tool for managing large quantities of data and establishing historical identification of plate contents at any point in an assay or method. Creating a customized barcode is fast and easy using our simple step-by-step interface. Bring the power of bar coding to your process:

- Choose from 5 code types to best meet your application needs
- Select your label location – apply to one or more plate sides
- No repeats – guaranteed!
- Human-readable option, including positions and highlight color
- Sequences archived for data management
- Print a sample barcode to ensure compatibility with your reader



To create your own custom barcodes, go to  
[www.thermoscientific.com/barcodeconfigurator](http://www.thermoscientific.com/barcodeconfigurator)



## ► Thermo Scientific Nunc 384-Shallow Well Standard Height Polypropylene Microplates



**Nunc™ 384-well shallow well standard height polypropylene plates provide cost savings when storing compounds for small volume applications.**

Polypropylene is ideal for storage plates because of its lower binding capacity so proteins or DNA will not bind and allows complete sample recovery. Withstands temperatures from -80°C to +121°C. Offered in a variety of colors to allow for quick identification of your storage plates.

Polypropylene is a low-binding and chemically resistant surface making this plate ideal for storage.

### details

- Rounded wells are optimized for mixing and sample recovery
- Chemical resistant to DMSO
- Square rounded wells minimize wicking (capillary action)
- Natural plates for storage or colorimetric assays
- White plates for storage identification of luminescent assays
- Black plates for storage or fluorescent assays
- Working volume range: 2-35 µl/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

### Nunc 384-ShallowWell Standard Height Polypropylene Microplates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
267459	Non-Treated	384 U	Natural	58	No	No	25	100
267460	Non-Treated	384 U	Natural	58	Yes	No	25	100
267461	Non-Treated	384 U	Black	58	No	No	25	100
267462	Non-Treated	384 U	White	58	No	No	25	100

► For custom barcoded plates, visit  
[www.thermoscientific.com/barcodeconfigurator](http://www.thermoscientific.com/barcodeconfigurator)



## ► Thermo Scientific Nunc Deep Well 384-Well Plates



**Nunc™ 384-Deep Well plates are ideal for compound library storage. The deep well design provides larger working volumes and the rounded square well minimizes wicking (capillary action).**

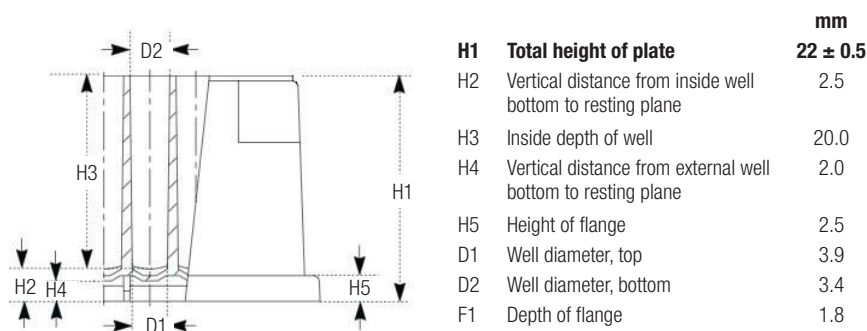
Polypropylene is the ideal storage plate, with a lower binding capacity so proteins or DNA will not bind. Allows complete sample recovery.

Polypropylene is a low-bind and chemically resistant surface, making this plate ideal for storage.

### details

- Raised rims around each well are ideal for heat or adhesive sealing
- Rounded wells are optimized for mixing
- Compatible with robotics and automation
- Optimized for liquid handling systems
- Working volume range: 5-240 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

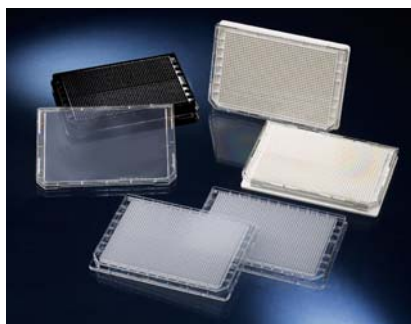


### Nunc DeepWell 384-Well Plate

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
269390	Non-Treated	384 U	Natural	252	No	No	5	60



## ► Thermo Scientific Nunc 1536-Well High Base Microplates



**Nunc™ 1536-Well High Base Microplates** are ideal for high-throughput screening. The skirted design around the base of the plate is optimal for robotic handling.

Work with small volumes and screen four times as many samples in one plate.

### details

- Black microplates are recommended for fluorescence measurements; with minimum back-scattered light and background fluorescence
- White microplates are recommended for luminescence measurements; with maximum reflection and minimal autoluminescence
- Cell Culture Treated: The Nuncion™ Delta cell culture treated surface is a hydrophilic surface that promotes cell attachment and growth.
- Working range: 2-10 µL/well

**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).

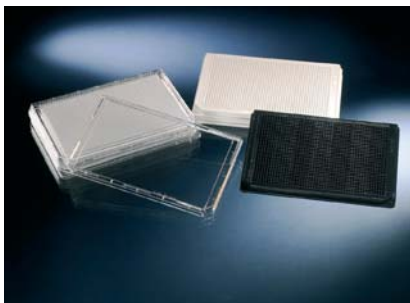
### Nunc 1536-Well High Base Microplates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. per Case
164707	Cell Culture	1536 F	Clear	13.4	Yes	Yes	25	100
164708	Cell Culture	1536 F	Black	13.4	Yes	Yes	25	100
164709	Cell Culture	1536 F	White	13.4	Yes	Yes	25	100
264710	Non-Treated	1536 F	Clear	13.4	No	No	25	100
264711	Non-Treated	1536 F	Black	13.4	No	No	25	100
264712	Non-Treated	1536 F	White	13.4	No	No	25	100

► For custom barcoded plates, visit  
[www.thermoscientific.com/barcodeconfigurator](http://www.thermoscientific.com/barcodeconfigurator)



## ► Thermo Scientific Nunc 1536-Well Microplates Plates



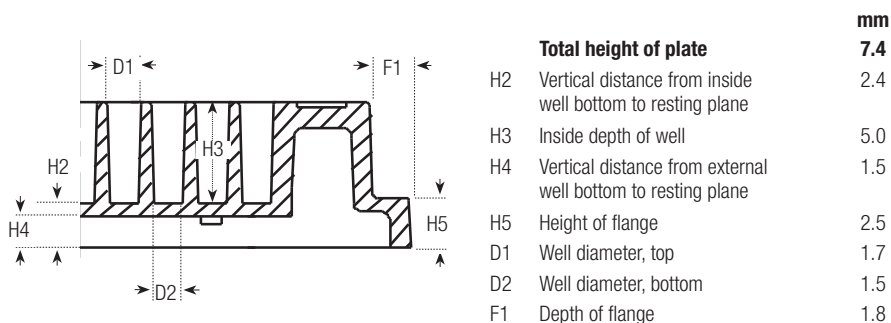
**Nunc™ 1536-Well Microplates are ideal for high-throughput screening.**

Work with small volumes and screen four times as many samples in one plate.

### details

- Low plate height is optimized for stacking
- Black microplates are recommended for fluorescence measurements, with minimum back-scattered light and background fluorescence
- White microplates are recommended for luminescence measurements, with maximum reflection and minimal autoluminescence
- Working well volume: 1-10 µL/well

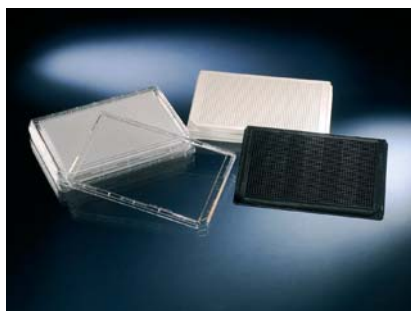
**Compliance:** All Nunc microplates meet the recommendation of American National Standards Institute (ANSI).



### Nunc 1536-Well Microplates Plates

Cat. No.	Surface	Well Design	Color	Total Vol., µL	Sterile	Lid	No. per Pack	No. Per Case
253601	Non-Treated	1536 F	Black	13.4	No	No	30	90
253607	Non-Treated	1536 F	White	13.4	No	No	30	90
253614	Non-Treated	1536 F	Clear	13.4	No	No	30	90

## ► Thermo Scientific Nunc Microplate Lids



**Nunc™ Microplate lids protect samples from contamination and evaporation during assay processing, incubation or storage.**

### details

- 96-well lids have individual condensation rings
- Lids have notches for quick orientation
- Universal lids can be used on any standard height plate on the market

### Nunc Microplate Lids

Cat. No.	Height, without stacking holders, mm	Cut-off Corners	Condensation Rings	Evaporation Barrier	Color	Sterile	No. per Pack	No. Per Case
<b>Standard Lids, for 96-MicroWell Plates</b>								
<b>With condensation rings and evaporation rim; Polystyrene; External dimensions 127 x 85 mm</b>								
263339	Standard, 7.9	Long Side	Yes	Yes	Clear	No	5	100
264122	Standard, 7.9	Long Side	Yes	Yes	Clear	Yes	1	50
264623	Standard, 7.9	Long Side	Yes	Yes	Clear	Yes	20	60
<b>Standard Lids for 96-Optical Bottom Plates</b>								
<b>With condensation rings and evaporation rim; Polystyrene; External dimensions 127 x 85 mm</b>								
255983	Standard, 7.8	Right short side	Yes	Yes	Clear	No	20	60
<b>Standard Lids for 384-Well Plates</b>								
<b>With evaporation rim; Polystyrene; External dimensions 127 x 85 mm</b>								
264611	Standard, 7.9	Long side	No	Yes	Clear	Yes	1	60
264612	Standard, 7.9	Long side	No	Yes	Clear	No	20	180
264616	Standard, 7.9	Long side	No	Yes	Clear	Yes	20	180
<b>White Lid, for 384- and 1536-Well Plates and OmniTrays</b>								
<b>Polystyrene; External dimensions 127 x 85 mm</b>								
448143	Low-profile, 7.9	Long side	No	No	White	No	20	120
<b>Universal Lid for 384- and 1536-Well Plates</b>								
<b>With side cut-out and evaporation rim; Polystyrene; External dimensions 127 x 85 mm</b>								
250002	Standard, 8.34	No	No	No	Clear	Yes	20	60
250003	Standard, 8.34	No	No	No	Clear	No	20	60
250005	Standard, 8.34	No	No	No	Clear	No	20	180
<b>LowBot Lids, Universal Version for 384- and 1536-Well Plates</b>								
<b>With condensation rings and evaporation rim; Polystyrene; External dimensions 127 x 85 mm</b>								
253623	Low profile, 4.6	No	No	Yes	Clear	No	25	100
253624	Low profile, 4.6	No	No	Yes	Clear	Yes	25	100



## ► Thermo Scientific Nunc Barcode Scanners



**Nunc™ Barcode Scanners with “Plug and Play” functionality play a critical role in sample tracking.**

The scanner can automatically switch to read codes: 128A, 128B, 128C, 39 and Interleave 2/5. Convenient and simple to use with an Excel spreadsheet.

Durable, low cost, and easy to use – simply plug into a USB or keyboard port.

### details

- Scanners automatically switch between Code 128, Code 39, Interleave 2 of 5 and several other barcodes
- Must be in contact with the barcode to read

### Nunc Barcode Scanners

Cat. No.	For Use with
330040	Nunc Bar Code Scanner; designed to plug into any keyboard
330050	Nunc Bar Code Scanner; designed to plug into any USB port







## ► Thermo Scientific Nalgene Storage Racks for Microplates



**Nalgene™ Horizontal storage racks provide a secure convenient storage system and allows transport of samples in microplate, deep-well plates and Cryobank racks.**

These racks are ideal for genome library storage, DNA and RNA libraries, storage of compounds for high-throughput screening.

### details

- Fit 1.0 mL Cryobank cryogenic storage vials
- Horizontal design fits most refrigerators and freezers
- Retainer clip on each compartment holds plates securely in place
- Handles on tops and sides for easy transport
- Label holder for easy identification of contents of rack

**Nalgene Storage Racks for Microplates**

Cat. No.	Array	Capacity	Holds	L x W x H, cm (in)	No. per Case
5039-0048	4 x 4	80 Low profile, 48 Standard, 16 Deep well	48 standard plates (16 deep well)	38.7 x 13.9 x 21.6 (15 x 5.5 x 8.5)	1
5039-0072	4 x 6	120 Low Profile, 72 standard, 24 Deep well	72 standard plates (24 deep well)	57.9 x 13.9 x 12.6 (23 x 5.5 x 8.5)	1

## ► Thermo Scientific Nunc Microplate Plastic Storage Racks



**Nunc™ plastic storage racks provide a secure convenient storage system and allow transport of samples in microplate, deep-well plates and Cryobank racks.**

These racks are ideal for genome library storage, DNA and RNA libraries, storage of compounds for high-throughput screening.

### details

- Horizontal design fits chest, upright freezers and incubator
- Retainer clip holds plates securely in place
- Handles on top and side for easy transport
- Locking bar keeps plates secure
- Handle allows convenient transport
- Freezer compatible down to -80°C
- Not for use in liquid/vapor nitrogen

**Nunc Microplate Plastic Storage Racks**

Cat. No.	Type	Style	L x W x H, cm (in)	Shelf Height, cm (in)	Color
344260	Standard Height	10 Tall	23 x 10 x 14 (9.05 x 3.94 x 5.5)	2 (3/4)	Green
344280	Standard Height	10 Tall x 5 Wide	25 x 51 x 14 (9.88 x 20.13 x 5.5)	2 (3/4)	Green
344380	DeepWell	5 Tall x 15 Wide	25 x 51 x 14 (9.88 x 20.13 x 5.5)	5 (2)	Green



## ► Thermo Scientific Nunc Vertical Microplate Storage Racks



**Nunc™ Vertical Microplate storage racks provide a secure, convenient storage system and allow transport of samples in microplate, deep-well plates and Cryobank racks.**

These racks ideal for genome library storage, DNA and RNA libraries, storage of compounds for high-throughput screening.

### details

- Adjustable shelves to fit any plate or tube rack
- Vertical design optimizes room in chest and upright freezers
- Retainer clip holds plates securely in place
- Handles on tops for easy transport
- Alignment rod on the front side secures plates and allows barcode reading
- Aluminum
- Autoclavable

### Accommodates:

- 18 Low Profile Microplates
- 10 Standard Height Microplates
- (6) 1 mL Deep Well Plates
- (5) 2 mL Deep Well Plates

### Nunc Vertical Microplate Storage Racks

Cat. No.	Color	Material	L x W, cm (in.)	No. per Case
367001	Blue	Aluminum	13.5 x 9.5 (5.31 x 3.74)	1
367002	Natural	Aluminum	13.5 x 9.5 (5.31 x 3.74)	1



## ► Thermo Scientific Nunc-Immuno Washers



**Nunc™-Immuno™ Washers allow flexible washing procedures and are ideal for low throughput labs that do not have microplate washers.**

The Nunc Immuno Washer is available in 8- and 12-channel versions to fit all 96-well plates.

Adjustable to all well shapes. No electrical connections required.

### details

- Uniform and efficient washing
- Simple and easy to use
- Can be autoclaved for sterilization
- Design eliminates overfilling and cross-contamination
- Autoclavable at 121°C (250°F) for sterilization of immuno washer

**Ordering Information:** Dimensions: 10.25 L x 4.5W x 3.75 in. D (26 x 11.5 x 9.5 cm).

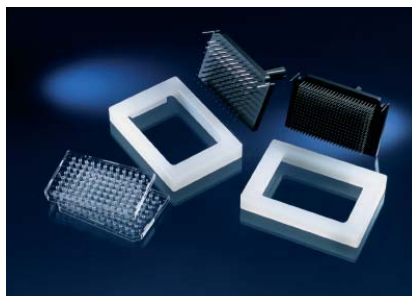
**Includes:** Two thumbscrews and one ruler for required adjustments for washing alternative well types; rack for secure storage support; spare parts kit for routine maintenance and cleaning wire. Spare parts kit includes five different O-rings and one spring.

### Nunc-Immuno Washers

Cat. No.	Description	Includes
470174	8-Channel Washer	Spare parts kit, ruler and rack
470175	12-Channel Washer	Spare parts kit, ruler and rack



## ► Thermo Scientific Nunc Replication System



**Nunc™ Replication Systems are designed for the replication of DNA libraries and are ideal for transferring small volumes from plate to plate.**

These replication systems work with Nunc 96- and 384-well microplates.

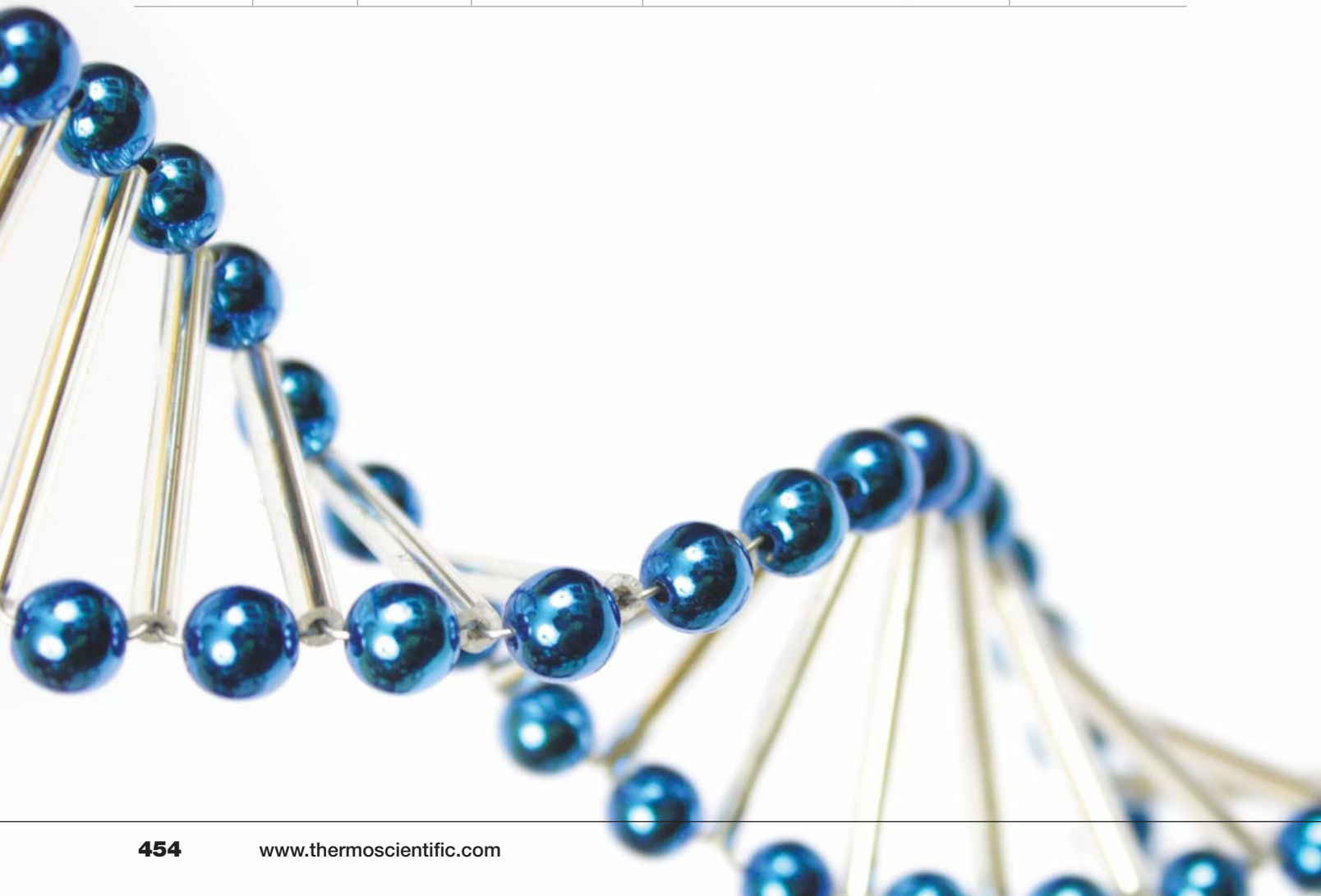
Ideal for transferring small volumes of inoculum from plate to plate or membrane.

### details

- Pins transfer 1.0  $\mu\text{L}$  of liquid or 0.1  $\mu\text{L}$  to solid supports
- Pins are flame-proof stainless steel for sterilization
- MicroWell™ copier alignment device simplifies conversion of 96-MicroWell plates to 384-well format
- Flame-proof stainless steel pins on 96- and 384-Pin Replicator
- For use with 96- and 384-Well Plate and OmniTray

### Nunc Replication System

Cat. No.	Description	Fits	L x W x H, mm	Material	Volume, $\mu\text{L}$
250393	Replicator	384-wells	121.6 x 83.3 x 135.4	Anodized aluminum with stainless steel pins	1 $\pm$ 0.1
250520	Replicator	96-wells	121.6 x 83.3 x 135.4	Anodized aluminum with stainless steel pins	1 $\pm$ 0.1





## ► Thermo Scientific Nalgene Disposable Polypropylene Robotic Reservoirs



**Nalgene™ Disposable Robotic Reservoirs with a standard microplate format with 300 mL volume increase walk-away time and assay efficiency.**

The convoluted design minimizes dead volume and has baffles to reduce splashing. The flat bottom version is designed to meet a variety of assay needs in both manual and automated environments.

### details

- Convoluted bottom design is most effective with a 96-well format
- Flat Bottom design can be used with single, 6-, 12-, 96-, 384- and 1536-well formats
- Polypropylene construction withstands robotic liquid handling, making it easier to run automated assays and increasing walk-away time
- Compatible with most robotic arms, plate stackers (hotels), plate cranes and platform configurations
- Reservoir volume is 300 mL (345 mL brim capacity), with molded-in graduations every 100 mL
- Nestable, for easy automated stacking and handling

**Dimensions:** 3.4 L × 5 W × 1.75 in. H (86 × 128 × 43 mm)

**Compliance:** Meets the recommendation of American National Standards Institute (ANSI).

### Nalgene Disposable Polypropylene Robotic Reservoirs

Cat. No.	Bottom Shape	Total Vol., $\mu$ L	Sterile	No. per Pack	No. Per Case
1200-1300	Flat	300	No	4	40
1200-1301	Flat	300	Sterile	4	40
1200-2300	Convoluted	300	Sterile	4	40
1200-2301	Convoluted	300	No	4	40



## ► Thermo Scientific Nunc Sealing Tapes



**Nunc™ Sealing Tapes minimize evaporation and protect samples from contamination and spilling.**

Adhesive seals are ideal for all assay applications.

### details

- Wide range of adhesive seals for every assay
- Adhesive seals effectively seal all microplate formats
- Pressure-sensitive adhesive is not tacky to touch; but forms a strong bond to the plate upon application of pressure
- Thin, lightweight tapes seal onto the plate with a convenient, handheld applicator (available separately, Cat. No. 250050)



*Cat. No. 250050*

### Nunc Sealing Tapes

Cat. No.	Material/Adhesive	Application	Color	Sterile	Pierceable	Certified RNase/ DNase-free	Temperature Range	No. per Pack	No. Per Case
232698	Aluminum/Acrylate	PCR and storage in 96-well plates	Silver	No	Yes	Yes	-80° to +150°C	100	100
232699	Aluminum/Acrylate	PCR and storage in 384-well plates	Silver	No	Yes	Yes	-80° to +150°C	100	100
232701	Polyolefin/Acrylate	Low autofluorescence; DMSO compatible; microscopy	Clear	No	No	No	-70° to +100°C	100	100
232702	Polyolefin/Acrylate	PCR; fluorescence assays; microscopy	Clear	No	No	Yes	-70° to +100°C	100	100
235306	Polyethylene/Silicone	Repeated piercing; low autofluorescence	Clear	No	Yes	No	-40° to +90°C	100	100
235307	Polyolefin/Silicone	Q-PCR; microscopy, lowest fluorescence	Clear	No	No	No	-70° to +100°C	100	100
236269	Polyester/Acrylate	Stiffer than polyolefin; general purpose	Clear	No	No	No	-20° to +100°C	200	800
236272	Polyester/Acrylate	Opaque; luminescence assay; bottom of plate	White	No	No	No	-40° to +80°C	50	50
236366	Polyester/Acrylic	Cell culture; sterile applications	Clear	Yes	No	No	-70° to +100°C	200	800
236370	Polyester/Silicone	General purpose; sample protection	Clear	No	No	No	-70° to +100°C	100	100
236703	Vinyl/Acrylate	For plate top or bottom; photo-sensitive samples	Black	No	No	No	-40° to +80°C	50	50
236707	Polyester/Acrylic	Convenient roll dispenser; general purpose	Clear	No	No	Yes	-20° to +100°C	1000	1000
236710	Polyolefin/Acrylate	Convenient roll; low autofluorescence; DMSO	Clear	No	No	Yes	-70° to +100°C	400	400
241205	Rayon/Acrylate	Breathable; cell culture	White	Yes	Yes	No	-20° to +80°C	20	50
249720	Rayon/Acrylate	Breathable	White	No	No	Yes	-20° to +80°C	50	50
276014	Aluminum/Silicone	General use, PCR, photo-sensitive samples	Silver	No	Yes	Yes	-80° to +120°C	100	100
250050		Hand held applicator promotes consistent seal	Gold		No	No		2	2





## ► Thermo Scientific Automated Adhesive Seals



**Adhesive seal rolls are designed for use with the automated adhesive sealers.**

The automated format provides efficient sealing for high-throughput applications at a lower cost per plate.

### details

#### Adhesive PCR Foil Roll

- Strong adhesive seal prevents evaporation during sample storage or thermal cycling, while allowing sample access by piercing foil with pipet tips
- No adhesive build-up on tips after piercing
- PCR Foil Seals are recommended for use in conjunction with a cycler that has a screw-down or clip-down lid
- Temperature range: -80°C to +150°C

#### Adhesive PCR Film

- Optically-clear adhesive plate seal for sample storage; thermal cycling with screw down or clip down lid.
- Strong adhesive, peelable with no sticky residue left on the plate.
- Temperature range: -20°C to 120°C

#### ABsolute QPCR Seal Roll

- Optically-clear adhesive plate seal is designed for fluorescence applications, including QPCR
- Features strong pressure-sensitive, non-sticky adhesive that prevents evaporation during sample storage or thermal cycling
- Seals are easily peelable, but leave no sticky residue on the plate when removed
- Recommended for use in conjunction with a cycler that has a screw-down or clip-down lid
- Temperature range: -80°C to +110°C
- Optically-clear, pressure-sensitive, non-sticky adhesive seal for crystallography and genotyping applications

#### Adhesive Crystallography Seal Roll

- Samples are not exposed to adhesive
- Seal is easily peelable without leaving residue on the plate
- Temperature range: -70°C to +110°C

### Adhesive Seals

Cat. No.	Description	Dimensions, mm	No. per Case
AB-2170	ABsolute QPCR Seal: Optically-clear, peelable with no sticky residue left on the plate; Ideal for fluorescence applications such as QPCR	80 x 250	1
AB-2450	Adhesive Crystallography Seal Roll Optically-clear, peelable with no sticky residue left on the plate; Ideal for crystallography and genotyping	80 x 250	1
AB-2558	Adhesive PCR Film: Strong adhesive, peelable with no sticky residue left on the plate; Suitable for sample storage; Thermal cycling with screw down or clip down lid	80 x 100	1
AB-2626	Adhesive PCR Foil: Strong adhesive peelable can be pierced with a pipette tip; Suitable for sample storage; Thermal cycling with screw down or clip down lid	80 x 100	1



## ► Thermo Scientific SuperSealer



### Ensure a proper seal on plates, blocks and storage tube racks with the Thermo Scientific SuperSealer.

Choose individual sealing options such as Thermo Scientific Matrix SepraSeal mats for liquid handling and single tube accessibility or seal entire plates and blocks for storage with Thermo Scientific Nunc CapMats. Effectively apply adhesive tape seals and ensure a tight seal with the included SuperSealer Adhesive Seal Mat.

#### details

##### Sealing Simplicity

- Simplifies the sealing of plates, blocks and tube racks of virtually any height, with no adjustments needed, ensuring a secure and consistent seal
- Once the seal along with the plate, block or tube rack are placed into the drawer, simply close the door to initiate sealing

##### Sealing Flexibility

- Designed to work with Thermo Scientific Matrix SepraSeal mats, any CapMats or any pre-cut adhesive tape seal, you can be assured a proper seal regardless of sealing option

**Includes:** Automatic cap, tape and SepraSeal mat applicator

**Warranty:** 1 Year in-factory warranty on parts and labor

**Certifications:** CE Marked

#### Specifications

Speed	10-15 seconds/plate, block or rack of tubes
Dimensions W x D x H	165 x 317.5 x 343 mm (6.5 x 12.5 x 13.5 in.)
Weight	13.5 kg (30 lbs.)
Power Supply	110-240V

*\*The SuperSealer is designed to only work with full racks of tubes*

#### SuperSealer

Cat. No.	Description
4110-11	Thermo Scientific Super Sealer
4423	Mat for Adhesive Seal Application with Super Sealer

## ► Thermo Scientific ALPS 25 Manual Heat Sealer



**The ALPS 25 manual heat sealer is a simple-to-use, hand-operated sealer designed for low-throughput labs.**

Heat sealing offers superior sample protection of storage and reaction plates in applications including compound storage, sample archiving and PCR applications.

### details

#### Sealing Flexibility

- Compatible with virtually any height microplate or block, including PCR plates
- Choose from a wide range of heat seals for any application, including pierceable, optically-clear and permanent

#### Safe, Compact Design

- Built-in thermostat controls trigger automatic system shutoff to prevent overheating of the ALPS 25 sealer
- Lightweight with small footprint for ease of placement and relocation

**Compatible Products:** The ALPS 25 sealer is part of a complete line of microplate heat sealing instruments. For enhanced ergonomics, and variable time and temperature settings, consider the semi-automated Thermo Scientific ALPS 50 V microplate heat sealer. For automated microplate sealing, see the Thermo Scientific ALPS 3000.

**Warranty:** 1 year in-factory warranty on parts and labor.

**Certifications:** CE marked.



**see page 463**

for heat seals  
accessories compatible  
with this product

Specifications	
Operating Temperature Range	10° to 35°C
Sealing Temperature Range	Ambient to 220°C
Operating Humidity Range	10 to 80%
Fuse	5A/110V/500W
Power Supply	5A (AB-0384/110); 3.15A (AB-0384/220)
Dimensions W x D x H	140 x 330 x 150 mm (5.5 x 13 x 5.9 in.)
Weight	3.4 kg (7.5 lbs.)

### ALPS 25 Manual Heat Sealer

Cat. No.	Description	No. per Case
AB-0384/110	ALPS 25 Manual Heat Sealer, 100 Volt	1
AB-0384/220	ALPS 25 Manual Heat Sealer, 220 Volt	1

### ALPS Heat Sealer Accessories

Cat. No.	Description	No. per Case
AB-0563/1000	96Well PCR Plate Carrier	1
AB-0579	96-Pin Pierce Plate	1
AB-0592	Foil Stripper	1
AB-0724	384Well PCR Plate Carrier	1
AB-0827	Standard Microplate Carrier	1
AB-1118	96Well (V) Conical Bottom Storage Plate Carrier	1
AB-1177	ALPS 25 Sealer Stand and Shuttle Assembly Upgrade	1



## ► Thermo Scientific ALPS 50 V Microplate Heat Sealer



**The ALPS 50 V semi-automated microplate heat sealer is designed to provide sealing consistency in low to medium throughput labs.**

Heat sealing offers superior sample protection of storage and reaction plates in applications including compound storage, sample archiving and PCR.

With the semi-automated ALPS 50 V microplate heat sealer, secure tight seals around individual wells eliminate sample loss through evaporation and cross contamination between wells. Choose from a wide range of heat seals, including pierceable, optically-clear and permanent, for any application.

### details

#### Application Flexibility

- Simple on-board touch pad controls adjust sealing temperature and time for reproducible results
- Audible alarm indicates sealing completion

#### Ergonomic Design

- Compact footprint conserves bench space
- Counter lever handle design provides minimal strain when operating the instrument
- Lightweight, at only 7.2kg (15.9 lbs.) for easy relocation

**Warranty:** 1 year in-factory warranty on parts and labor

**Certifications:** CE marked



**see page 463**

for heat seals  
accessories compatible  
with this product

Specifications	
Temperature Setpoint Range	125° to 200°C in 1°C increments
Time Set Point Range	1 to 9 seconds in 0.5 second increments
Operating Temperature Range	18° to 30°C
Humidity Control	20-80% noncondensing
Power Rating	100-130V – T3.15A (IEC 127) or 220-240V – T1.6A (IEC 127)
Power Supply	100-130 VAC, 50-60Hz or 220-240 VAC, 50-60Hz, 350W fuse
Fuse	350W
Mains Input Connector	IEC 320
Dimensions W x D x H	220 x 321x 425 mm (8.7 x 12.6 x 16.7 in.)
Weight	7.2 kg (15.9 lbs.)

#### ALPS 50 V Microplate Heat Sealer

Cat. No.	Description	No. per Case
AB-1443	ALPS 50 V Semi automated Microplate Heat Sealer	1

#### ALPS Heat Sealer Accessories

Cat. No.	Description	No. per Case
AB-0563/1000	96Well PCR Plate Carrier	1
AB-0579	96-Pin Pierce Plate	1
AB-0592	Foil Stripper	1
AB-0724	384-Well PCR Plate Carrier	1
AB-0827	Standard Microplate Carrier	1
AB-1118	96-Well (V) Conical Bottom Storage Plate Carrier	1
AB-1177	ALPS 25 Sealer Stand and Shuttle Assembly Upgrade	1

## ► Thermo Scientific ALPS 3000 Automated Microplate Heat Sealer



**ALPS 3000 microplate heat sealer is a fast, compact heat sealer created for optimal robotic integration in high-throughput labs, yet allows manual, benchtop control.**

### details

- Compact footprint (165 x 405 mm) to conserve bench space
- Top-loaded seals are easily accessible

### Fast, Easy-to-use

- Light (11.8kg / 26 pounds)
- Seals are top-loading and easily accessible
- Rapid plate sealing action (6 seconds/plate) in either high-throughput robotic applications or benchtop, hand-fed operations
- Available with a variety of available heat seals to meet any laboratory application, including PCR, colorimetric, fluorescence, long-term storage, low temperature storage, piercing and resealing
- On-board touch screen operation for benchtop use and RS232 port with included ASCII programming parameters for robotic integration

### Safe and Secure

- Sensors detect the presence of sealing tape and plate
- Air input allows automatic system shutoff to eliminate product waste, system hold-ups and potential injury

### Sealing Flexibility

- Compatible with virtually any height microplate or block, including PCR plates

**Warranty:** 1 Year in-factory warranty on parts and labor

For Compatible Heat Seals Accessories used with this product please see page 10, *Heat Seals*.

**Certifications:** CE Marked



**see page 463**

for heat seals  
accessories compatible  
with this product

Specifications	
Dimensions W x D x H	414 x 185 x 350 mm (16.3 x 7.3 x 13.8 in.)
Weight	12 kg (26.5 lbs.)
Speed	6 to 12 seconds per plate
Power Supply	110-240 VAC, 50-60 Hz
Air Requirements	50 liters per minute
Air Input Pressure	5.5 bar (80psi) to 5.7 bar (87psi)
Sealing Temperature Range	Ambient to 200°C
Operating Temperature Range	15° to 40°C
Sealing Plate Height, mm	8 to 46

### ALPS 3000 Automated Microplate Heat Sealer

Cat. No.	Description	No. per Case
AB-3000	ALPS 3000 Automated Microplate Heat Sealer	1
AB-0592	Foil Stripper	1

# pipetters & tips



## **Proven leadership in the palm of your hand.**

For more than 40 years, Thermo Scientific products have led the way in liquid handling and handheld pipetting products. For pipettes you'll turn to again and again, choose Thermo Scientific manual or electronic models to deliver the performance you require. Unique to the FinnpiPETTE™ Novus™ pipetter, the adjustable index-finger trigger action prevents common repetitive stress injuries caused by thumb-driven pipetters, and the easy-to-follow prompts guide Novus users through 10 pipetting functions.

Our extensive portfolio includes pipette tips designed to perform with high precision and accuracy to meet any application challenge, including products from Matrix, MBP and other leading brands.



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[www.thermoscientific.com/pipette](http://www.thermoscientific.com/pipette)



## ► Thermo Scientific Heat Seals



### Heat sealing microplates are ideal for storage applications.

Advantages over other plate sealing methods include time and cost savings and sealing integrity. When heat sealing, the sealing material is first placed in position over the plate, which must have a raised rim around each well. Heat is applied evenly for several seconds, resulting in binding of the sealing material to the raised rim to achieve a complete seal. Heat sealing offers the capability of retrieving samples and then re-sealing the plate.

### details

See table below for detailed description of each seal

#### Thermo Scientific Heat Sealers are:

- Fast
- Safe for temperature-sensitive samples
- Designed for reliable performance with Thermo Scientific ALPS instruments, including the ALPS 3000, ALPS 25 and ALPS 50 V

For Compatible Heat Sealers used with these products, see ALPS 25, ALPS 50 and ALPS 3000 Heat Sealers.

### Heat Seals

Cat. No.	Description	Compatible with	Dimensions, mm	Packaging
AB-0559	Thermo Seal: Foil laminate; Very strong seal; Excellent chemical resistance; Recommended for use with DMSO The robust sealing option	ALPS 25 and 50V	85 x 135 mm	100 sheets/roll
AB-0685	Clear Seal Strong Clear polyester-polypropylene seal cannot be peeled or pierced; Optically transparent for sample inspection	ALPS 25 and 50V	85 x 135 mm	100 sheets/roll
AB-0745	Easy Peel Foil laminate for long-term storage; good for low temperatures to -200°F	ALPS 25 and 50V	85 x 135 mm	100 sheets/roll
AB-0757	Easy Pierce Easily pierced foil material for PP, PE and PCR ; Accepts secondary foil application for re-sealing; Good chemical compatibility; Ideal for use with DMSO	ALPS 25 and 50V	85 x 135 mm	100 sheets/roll
AB-0812	Diamond Seal Clear polymer seal	ALPS 25 and 50V	85 x 135 mm	100 sheets/roll
AB-1720	Easy Pierce 20 µm-Thin foil for excellent pierceability, including multiple seals for repeated sealing; 85 X 135 mm sheets; For use with the ALPS 25 and ALPS 50V; 100 sheets per roll	ALPS 25 and 50V	85 x 135 mm	100 sheets/roll
AB-1797	Clear Seal Thin, clear polymer seal; Pierceable; Non-conductive	ALPS 25 and 50V	85 x 135 mm	100 sheets/roll
AB-3559	Thermo Seal: Foil laminate; Very strong seal; Excellent chemical resistance; Recommended for use with DMSO; The robust sealing option	ALPS 3000	78 x 370 mm	1 roll
AB-3686	Clear Seal: Strong, clear polyester-polypropylene seal cannot be peeled or pierced; Optically transparent for sample inspection	ALPS 3000	78 x 610 mm	1 roll
AB-3720	Easy Pierce 20 µm: Thin foil for excellent pierceability, including multiple seals for repeated sealing	ALPS 3000	78 x 610 mm	1 roll
AB-3738	Easy Pierce: Easily pierced foil material for PP, PE and PCR; Accepts secondary foil application for re-sealing; Good chemical compatibility; Ideal for use with DMSO	ALPS 3000	78 x 610 mm	1 roll
AB-3739	Easy Peel: Foil laminate for long-term storage; Good for low temperatures to -200°F; Can be easily removed and a new seal applied	ALPS 3000	78 x 610 mm	1 roll
AB-3797	Clear Seal: Thin, clear polymer seal; Pierceable; Non-conductive; For Use with the ALPS 3000; 78 mm x 610m roll	ALPS 3000	78 x 610 mm	1 roll
AB-3799	Diamond Seal Clear polymer seal; Peelable seal with excellent optical clarity	ALPS 3000	78 x 370 mm	1 roll



## packaging | 466-563

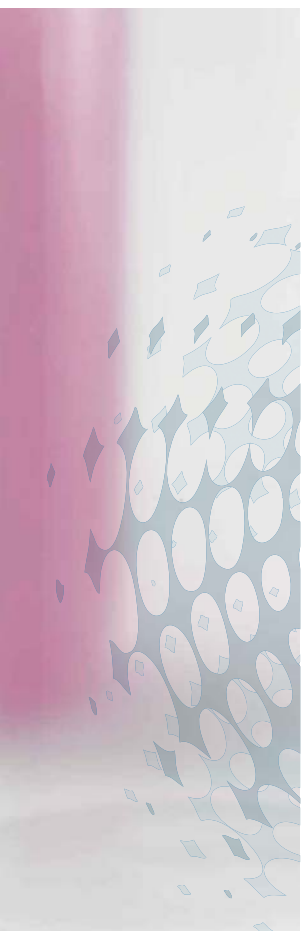
Proven quality and selection with unparalleled support.

Thermo Scientific Nalgene packaging bottles set the standard for superior performance, extensive resin and product selection and comprehensive worldwide support. From diagnostic and media bottles to bulk laboratory grade, packaging grade and certified sterile containers – every packaging bottle solution offers dependable benefits no one else can match.

Our singular commitment to excellence allows us to stand behind every Nalgene™ bottle and closure with a leakproof guarantee. Only the highest quality resins are used that meet the most stringent standards in pharmaceutical, university research, food and consumer applications. Superior resins ensure low levels of extractables that can contaminate the bottle contents.

We also offer the widest choice in bottle selection in a range of materials, shapes and sizes, including LDPE, HDPE and FLPE bottles. Autoclavable PPCO, FEP and PFA bottles, in addition to PET and PETG offerings that are presterilized, are available. Every bottle is manufactured in the U.S. to the highest standards, ensuring maximum quality and performance.

► For more information about Thermo Scientific Nalgene packaging bottles visit:  
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**proven**  
superior quality and choice



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## Closure system

Designed and offered as a system, Nalgene bottles and closures are guaranteed leakproof\* and offer superior resealability. Most Nalgene closures have no liner\*\* that can wear, crease, cause contamination or separate.

Nalgene closures are made specifically for Nalgene bottles. Use of Nalgene bottles or closures with non-Nalgene components voids the leakproof guarantee. All bottles in this catalog have Nalgene closures available.

\* *Leakproof* defined in the product sections.

\*\* Closures with gaskets or liners are noted in the product descriptions.



## ► Thermo Scientific Nalgene Diagnostic Bottles with Closures

natural high-density polyethylene with polypropylene closures, non-sterile, bulk pack



**Nalgene™ HDPE Diagnostic Bottles with natural PP closures are used in test kits and many small-volume applications.**

Diagnostic bottles can be used for sampling, storage and shipping of small volume, valuable reagents.

### details

- Non-sterile
- Natural, translucent high-density polyethylene
- Natural, linerless polypropylene closures
- Durable, uniform walls are resistant to splitting or puncturing
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton. 2000 per case.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles with Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312002-9125	4 (1/8)	13-415	8	16	41	2000	2000
312002-9025	8 (1/4)	20-415	14	25	45	2000	2000
312002-9050	15 (1/2)	20-415	14	25	58	2000	2000

**seal ring** A seal ring molded inside the closure fits tightly against the beveled inner edge (chamfer) of the bottle neck forming a leakproof valve seal as the closure is tightened. Most bottles and closures are molded of different materials to enhance their sealing capability.

**neck ring** Most Nalgene bottles have a neck ring for use with tamper-evident shrink bands.

**threads** Nalgene containers have continuous straight-shouldered, semi-buttress threads. They are deeper than you'll find on typical plastic or glass bottles. It's virtually impossible to jump or strip the threads by over-torque. They're another mark of good bottle design.

**heavy-duty, uniform walls** You can feel and see the difference. Advanced molding technology provides walls with a degree of uniform thickness and quality you will not find in other bottles. The durable walls of Nalgene bottles are unusually resistant to splitting or puncturing.

**bottom** Look at the bottom of a Nalgene bottle. The base is flatter than most for greater stability – especially important when bottles are used on filling lines. Resin identification letters are molded into the bottom, along with the capacity. SPI recycling codes are molded into Lab Quality Bottles 500 mL and larger.



## ► Thermo Scientific Nalgene Diagnostic Bottles with Closures

high-density polyethylene with polypropylene closure, non-sterile, shrink-wrapped tray packed



**Nalgene™ HDPE Diagnostic Bottles with natural PP closures are used in test kits and many small volume applications.**

Diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents. Tray packed for easy handling.

### details

- Non-sterile
- Natural translucent HDPE with Natural PP Closure provides excellent chemical resistance
- Durable, uniform walls are resistant to splitting or puncturing
- Bottles are packed in rigid trays, allowing for easy handling
- Leakproof†

**Ordering Information:** Bottles are packed in shrink-wrapped trays. Closures are packed in a separate polybag within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles with PP Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
322002-9125	4 (1/8)	13-415	8	16	41	332	1328
322002-9025	8 (1/4)	20-415	14	25	45	150	1500
322002-9050	15 (1/2)	20-415	14	25	58	150	1500

† Thermo Scientific Nalgene assigns the term "leakproof" a) To bottle/closure systems with closures smaller than 100 mm, after they are filled with water, inverted, withstand air pressure of 2 psig for 2 minutes, and no water escapes; b) To bottle/closure systems of 100 or 120 mm after they are filled with water, inverted for 15 minutes, and no water escapes. Note: these tests, using other liquids, may not yield the same results. To ensure safe usage, Thermo Scientific Nalgene advises customers to test bottles and closures under conditions of their planned applications. Nalgene™ bottles and carboys are leakproof at ambient temperature and pressure when used with their Nalgene closures.





## ▶ Thermo Scientific Nalgene Diagnostic Bottles without Closures

natural high-density polyethylene, non-sterile, bulk pack



**Nalgene™ HDPE Diagnostic Bottles are used in test kits and many small-volume applications.**

Diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents. These bottles are packed without closures so they can be matched with various colored closures (Cat. No. 362150).

### details

- Non-sterile
- Natural, translucent high-density polyethylene
- Durable, uniform walls are resistant to splitting or puncturing
- Leakproof† when assembled with closure (must be ordered separately)

**Ordering Information:** Bottles are bulk packed without closures. 2000 per case. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles without Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362002-9125	4 (1/8)	13-415	8	16	41	2000	2000
362002-9025	8 (1/4)	20-415	14	25	45	2000	2000
362002-9050	15 (1/2)	20-415	14	25	58	2000	2000



## ► Thermo Scientific Nalgene Diagnostic Bottles with Closures

high-density polyethylene with white polypropylene closure, sterile, shrink-wrapped tray packed



**Nalgene™ sterile Tray-Packed Diagnostic Bottles with white polypropylene closures are used in test kits and many small volume packaging applications.**

Shrink-wrapped trays facilitate the easy handling of the bottles. Trays can be used as an aid for machine fill line loading.

### details

- Produced in a controlled environment
- Trays are easy to handle
- Include linerless white polypropylene closures
- Durable, uniform walls are resistant to splitting or puncturing
- Sterile to  $10^{-6}$  SAL
- Bottles with closures assembled come in an sbs tray
- Leakproof†

**Ordering Information:** Bottles are packed in shrink-wrapped trays with closures assembled.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342002-9025	8 (1/4)	20-415	14	25	45	98	980
342002-9050	15 (1/2)	20-415	14	25	58	112	896

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– search *Nalgene Bottles*.

## ► Thermo Scientific Nalgene Diagnostic Bottles with Closures

translucent amber high-density polyethylene with opaque amber polypropylene closures, non-sterile, bulk pack



**Nalgene™ translucent amber HDPE Diagnostic Bottles with opaque amber polypropylene closures are used in test kits and many small-volume applications.**

Diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents.

Translucent amber bottles provide light resistance with the ability to see liquid level.

### details

- Non-sterile
- Translucent amber high-density polyethylene bottles
- Opaque amber, linerless polypropylene closures
- Durable, uniform walls are resistant to splitting or puncturing
- Non-cytotoxic
- Leakproof†
- Translucent amber bottles provide light protection with the ability to see liquid level inside

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton. 2000 per case.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meet the requirements for light-resistant containers per USP latest edition.

### Nalgene Diagnostic Bottles with Closure

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312084-9125	4 (1/8)	13-415	8	16	41	2000	2000
312084-9025	8 (1/4)	20-415	14	25	45	2000	2000
312084-9050	15 (1/2)	20-415	14	25	58	2000	2000



## ► Thermo Scientific Nalgene Diagnostic Bottles with Closures

opaque amber high-density polyethylene with opaque amber polypropylene closures, non-sterile, bulk pack



**Nalgene™ opaque amber HDPE Diagnostic Bottles with opaque amber polypropylene closures are used in test kits and many small-volume applications.**

Opaque amber diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents that are sensitive to light.

The opaque amber color of these bottles make them ideal for packaging light-sensitive reagents.

### details

- Non-sterile
- Opaque amber high-density polyethylene bottles
- Opaque amber linerless polypropylene closures
- Durable, uniform walls are resistant to splitting or puncturing
- Non-pyrogenic and non-cytotoxic
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton. 2000 per case.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Products meet the requirements for light-resistant containers per USP latest edition.

### Nalgene Diagnostic Bottles with Closure

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312004-9125	4 (1/8)	13-415	8	16	41	2000	2000
312004-9025	8 (1/4)	20-415	14	25	45	2000	2000
312004-9050	15 (1/2)	20-415	14	25	58	2000	2000

## ► Thermo Scientific Nalgene Diagnostic Bottles with Closures

opaque amber high-density polyethylene with opaque amber polypropylene closure, non-sterile, shrink-wrapped tray packed



**Nalgene™ Amber HDPE Diagnostic Bottles with amber PP closures are used in test kits and many small volume applications.**

Diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents that are light sensitive. Tray packed for easy handling.

### details

- Non-sterile
- The opaque amber color of these bottles make them ideal for packaging light-sensitive reagents
- Opaque Amber HDPE with Opaque Amber PP Closure provides excellent chemical resistance
- Durable, uniform walls are resistant to splitting or puncturing
- Bottles are packed in rigid trays allowing for easy handling
- Leakproof†

**Ordering Information:** Bottles are packed in shrink-wrapped trays. Closures are packed in a separate polybag within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Diagnostic Bottles with Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
322004-9125	4 (1/8)	13-415	8	16	41	332	1328
322004-9025	8 (1/4)	20-415	14	25	45	150	1500
322004-9050	15 (1/4)	20-415	14	25	58	150	1500



## ► Thermo Scientific Nalgene Diagnostic Bottles without Closures

opaque amber high-density polyethylene, non-sterile, bulk pack



**Nalgene™ opaque amber HDPE Diagnostic Bottles without closures are used in test kits and many small-volume applications.**

Diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents that are sensitive to light.

These bottles are packed without closures so they can be matched with various colored closures (Cat. No. 362150).

### details

- Non-sterile
- Opaque, amber high-density polyethylene
- Durable, uniform walls are resistant to splitting or puncturing
- Leakproof† when assembled with closure (must be ordered separately)

**Ordering Information:** Bottles are bulk packed without closures. 2000 per case. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition when used with colored closures.

### Nalgene Diagnostic Bottles without Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Pack
362004-9125	4 (1/8)	13-415	8	16	41	2000	2000
362004-9025	8 (1/4)	20-415	14	25	45	2000	2000
362004-9050	15 (1/2)	20-415	14	25	58	2000	2000



## ► Thermo Scientific Nalgene Diagnostic Bottles White without Closures

high-density polyethylene, non-sterile, bulk pack



**Nalgene™ white HDPE Diagnostic Bottles without closures are used in test kits and many small-volume applications.**

Diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents. Opaque white bottles are ideal for use with light-sensitive reagents.

These bottles are packed without closures so they can be matched with various colored closures (Cat. No. 362150).

### details

- Non-sterile
- Opaque white high-density polyethylene
- Durable, uniform walls are resistant to splitting or puncturing
- Leakproof† when assembled with closure (must be ordered separately)

**Ordering Information:** Bottles are bulk packed without closures. 2000 per case. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition when used with colored closures.

**Nalgene Diagnostic Bottles without Closures**

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362008-9125	4 (1/8)	13-415	8	16	41	2000	2000
362008-9025	8 1/4	20-415	14	25	45	2000	2000
362008-9050	15 (1/2)	20-415	14	25	58	2000	2000

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or download our free apps from iTunes or the Android market  
– search *Nalgene Bottles*.



## ▶ Thermo Scientific Nalgene Diagnostic Bottles with Closures

natural polypropylene copolymer with polypropylene closures, non-sterile, bulk pack



**Nalgene™ PPCO Diagnostic Bottles with polypropylene closures are used in test kits and many small-volume applications.**

Diagnostic Bottles can be used for sample storage and shipping of small volume, valuable reagents.

### details

- Non-sterile
- Natural, translucent polypropylene copolymer bottle
- Durable, uniform walls are resistant to splitting or puncturing
- Includes leakproof<sup>†</sup>, linerless, polypropylene closures
- Autoclavable

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton. 2000 per case.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles with Closure

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312006-9125	4 (1/8)	13-415	8	16	41	2000	2000
312006-9025	8 (1/4)	20-415	14	25	45	2000	2000
312006-9050	15 (1/2)	20-415	14	25	58	2000	2000



## ▶ Thermo Scientific Nalgene Diagnostic Bottles with Closures

natural polypropylene copolymer with polypropylene closures, non-sterile, shrink-wrapped tray packed



**Nalgene™ PPCO Diagnostic Bottles with natural PP closures are used in test kits and many small volume applications.**

Diagnostic Bottles can be used for sample storage and shipping of small volume, valuable reagents. Tray packed for easy handling.

### details

- Non-sterile
- Natural translucent PPCO with Natural PP Closure
- Durable, uniform walls are resistant to splitting or puncturing
- Autoclavable
- Bottles are packed in rigid trays allowing for easy handling
- Leakproof†

**Ordering Information:** Bottles are packed in shrink-wrapped trays. Closures are packed in a separate polybag within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles with Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
322006-9125	4 (1/8)	13-415	8	16	41	332	1328
322006-9025	8 (1/4)	20-415	14	25	45	150	1500
322006-9050	15 (1/2)	20-415	14	25	58	150	1500







## ► Thermo Scientific Nalgene Diagnostic Bottles without Closures

natural polypropylene copolymer, non-sterile, bulk pack



**Nalgene™ PPCO diagnostic bottles are used in test kits and many small volume applications.**

Diagnostic bottles can be used for sample storage and shipping of small volume, valuable reagents.

These bottles are packed without closures so they can be matched with various colored closures (Cat. No. 362150).

### details

- Non-sterile
- Natural translucent PPCO provides excellent chemical resistance
- Durable, uniform walls are resistant to splitting or puncturing
- Autoclavable
- Various colored closures are available for use with these bottles
- Leakproof† when assembled with closure (must be ordered separately)

**Ordering Information:** Bottles are bulk packed without closures. 2000 per case. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Diagnostic Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles without Closure

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362006-9125	4 (1/8)	13-415	8	16	41	2000	2000
362006-9025	8 (1/4)	20-415	14	25	45	2000	2000
362006-9050	15 (1/2)	20-415	14	25	58	2000	2000

### ► Select the perfect container for your application.

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– search *Nalgene Bottles*.



## ► Thermo Scientific Nalgene Serum Vials

polyethylene terephthalate copolyester, non-sterile, crimp finish, shrink-wrapped modules



**Nalgene™ PETG Non-Sterile Serum Vials** are made for use with stoppers and caps.

These serum vials are lighter in weight than glass and protect against leakage, breakage and contamination.

### details

- PETG
- Non-cytotoxic
- Non-pyrogenic
- Packaged in trayless shrink-wrap modules
- Non-sterile

**Ordering Information:** Serum Vials are packed in trayless shrink-wrapped modules. Stoppers and Caps not included.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vials meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Serum Vials

Cat. No.	Capacity, mL (oz.)	Neck Finish, mm	Neck I.D., mm	O.D., mm	Height without Closure, mm	No. per Module	No. per Case
322030-0010	10 (1/3)	20 - Crimp Finish	13	24	50	252	1260



## ► Thermo Scientific Nalgene Serum Vials

polyethylene terephthalate copolyester, sterile, crimp finish, shrink-wrapped modules



**Nalgene™ PETG Sterile Serum Vials are made for use with stoppers and caps.**

These serum vials are lighter in weight than glass and protect against leakage, breakage, and contamination.

### details

- PETG
- Non-cytotoxic
- Non-pyrogenic
- Packaged in trayless shrink-wrap modules
- Sterile to  $10^{-6}$  SAL

**Ordering Information:** Serum Vials are packed in trayless shrink-wrapped modules. Stoppers and Caps not included.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vials meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Serum Vials

Cat. No.	Capacity, mL	Neck Finish, mm	Neck I.D., mm	O.D., mm	Height without Closure, mm	No. per Module	No. per Case
342030-0003	3 (1/10)	13 - Crimp Finish	7	17	37	493	3451
342030-0005	5 (1/6)	20 - Crimp Finish	13	22	40	276	1932
342030-0010	10 (1/3)	20 - Crimp Finish	13	24	50	252	1260
342030-0020	20 (2/3)	20 - Crimp Finish	13	30	58	153	612



## ► Thermo Scientific Nalgene Serum Vials

polyethylene terephthalate copolyester, non-sterile, continuous thread, in shrink-wrapped modules



**Nalgene™ PETG Non-Sterile Serum Vials** are made for use with lined continuous thread closures (available separately).

These serum vials are lighter in weight than glass and protect against leakage, breakage, and contamination.

### details

- PETG
- Non-cytotoxic
- Non-pyrogenic
- Packaged in trayless shrink-wrap modules
- USP VI-compliant
- Non-sterile
- Leakproof† with Nalgene lined continuous thread closures (available separately)

**Ordering Information:** Serum Vials are packed in trayless shrink-wrapped modules. Order closures separately (Cat. No. 312158).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vials meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Serum Vials

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Module	No. per Case
322032-0005	5 (1/6)	20-415	11	22	44	276	1656
322032-0010	10 (1/3)	20-415	11	24	54	252	1260
322032-0020	20 (2/3)	20-415	11	30	64	153	612





## ► Thermo Scientific Nalgene Serum Vials

polyethylene terephthalate copolyester, sterile, continuous thread, shrink-wrapped modules



**Nalgene™ PETG Sterile Serum Vials are made for use with lined continuous thread closures (available separately).**

These serum vials are lighter in weight than glass, and protect against leakage, breakage and contamination.

### details

- PETG
- Non-cytotoxic
- Non-pyrogenic
- Packaged in trayless shrink-wrap modules
- Sterile to  $10^{-6}$  SAL
- Leakproof† with Nalgene lined continuous thread closures (Cat. No. 342158)

**Ordering Information:** Serum Vials are packed in trayless shrink-wrapped modules. Order closures separately (Cat. No. 342158).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vials meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Serum Vials

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Module	No. per Case
342032-0005	5 (1/6)	20-415	11	22	44	276	1656
342032-0010	10 (1/3)	20-415	11	24	54	252	1260
342032-0020	20 (2/3)	20-415	11	30	64	153	612

## ► Thermo Scientific Nalgene Serum Vials

polyethylene terephthalate copolyester, sterile, continuous thread, translucent amber, in shrink-wrapped modules



**Nalgene™ PETG Sterile Serum Vials are made for use with lined continuous thread closures.**

Our products are lighter in weight than glass and protect against leakage, breakage and contamination.

### details

- PETG
- Non-cytotoxic
- Non-pyrogenic
- Translucent amber
- Packaged in trayless shrink-wrap modules
- USP VI-compliant
- Sterile to  $10^{-6}$  SAL
- Leakproof† with Nalgene lined continuous thread closures (Cat. No. 342158)

**Ordering Information:** Serum Vials are packed in trayless shrink-wrapped modules. Order closures separately (Cat. No. 342158).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vials meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Products meet the requirements for light-resistant containers per USP latest edition when used with colored closures.

### Nalgene Serum Vials

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
342033-0010	10 (1/3)	20-415	11	24	54	252	1260



## ► Thermo Scientific Nalgene Diagnostic Bottles with Closures

polyethylene terephthalate copolyester with white high-density polyethylene lined closure, sterile, shrink-wrapped tray packed



**Nalgene™ PETG Sterile Diagnostic Bottles are constructed from polyethylene terephthalate copolymer with lined white HDPE closures.**

Bottles are ideal for sterile sampling, storage and shipment of reagents and buffer solutions.

### details

- Sterile to  $10^{-6}$  SAL
- Non-pyrogenic and non-cytotoxic
- 20-415 lined white HDPE closure attached to PETG vial
- Leakproof†

**Ordering Information:** Serum Vials are packed in shrink-wrapped trays with closures attached.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vials meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles with Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
2035-0005	5 (1/6)	20-415	11	22	46	20	100
2035-0010	10 (1/3)	20-415	11	24	56	20	100
2035-0020	20 (2/3)	20-415	11	30	65	20	100



## ▶ Thermo Scientific Nalgene Diagnostic Bottles with Closures

polyethylene terephthalate copolyester, sterile, bulk pack



**Nalgene™ PETG Diagnostic Bottles with closures are used in test kits and many sterile, small-volume applications.**

Sterile diagnostic bottles can be used for sampling, storage and shipping of small volume, valuable reagents.

### details

- PETG bottles have excellent clarity for viewing contents
- Includes lined, white HDPE closure for a leakproof† seal
- Capacities to 20 mL
- Non-pyrogenic and non-cytotoxic
- Sterile to  $10^{-6}$  SAL

**Ordering Information:** Serum Vials are packed in shrink-wrapped trays with closures attached.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vials meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Diagnostic Bottles with Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342035-0005	5 (1/6)	20-415	11	22	44	100	500
342035-0010	10 (1/3)	20-415	11	24	54	100	500
342035-0020	20 (2/3)	20-415	11	30	62	100	500





## ▶ Thermo Scientific Serum Vial Closures

high-density polyethylene, continuous thread, lined, non-sterile



**Nalgene™ HDPE Serum Vial Closures** are for use with Nalgene continuous thread PETG serum vials.

These closures are used to provide a leakproof seal without rubber stopper.

### details

- Three-ply co-extruded liner (LDPE core between two facings of solid HDPE)
- For use with non-sterile Nalgene PETG serum vials

**Ordering Information:** Serum Vials closures are bulk packed 2000 per case.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vial Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Serum Vial Closures

Cat. No.	Color	Nom. Weight, g	Neck Finish, mm	O.D., mm	Height, mm	No. per Pack	No. per Case
312158-0021	White	1.4	20-415	22.1	14.2	2000	2000
312158-0022	Black	1.4	20-415	22.1	14.2	2000	2000



## ► Thermo Scientific Serum Vial Closures

high-density polyethylene, continuous thread, lined, sterile



**Nalgene™ HDPE Serum Vial Closures are for use with Nalgene Continuous-Thread PETG Sterile Serum Vials.**

These closures eliminate the need for a rubber stopper.

### details

- Three-ply co-extruded liner (LDPE core between two facings of solid HDPE) in HDPE continuous thread closure
- Sterile to  $10^{-6}$  SAL
- For use with sterile PETG serum vials (sold separately) to provide a leakproof system
- Multiple closure colors available

**Ordering Information:** Serum Vial closures are bulk packed 2000 per case.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Serum Vial Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Serum Vial Closures

Cat. No.	Color	Nom. Weight, g	Neck Finish, mm	O.D., mm	Height, mm	No. per Pack	No. per Case
342158-0021	White	1.4	20-415	22.1	14.2	2000	2000
342158-0022	Black	1.4	20-415	22.1	14.2	2000	2000
342158-0023	Yellow	1.4	20-415	22.1	14.2	2000	2000
342158-0024	Green	1.4	20-415	22.1	14.2	2000	2000
342158-0025	Red	1.4	20-415	22.1	14.2	2000	2000
342158-0026	Blue	1.4	20-415	22.1	14.2	2000	2000



## ► Thermo Scientific Nalgene Dropper Bottles

low-density polyethylene, bulk pack



**Nalgene™ LDPE Dropper Bottles are made of low-density polyethylene for reliable/repeatable dispensing.**

Offer excellent chemical resistance and are flexible. Bottles are to be used with Nalgene controlled dropper tips and closures.

### details

- Natural or white LDPE bottles
- Dropper control tip snaps into place for a secure fit, sold separately
- Dropper tip delivers 40 or 50  $\mu$ L drops (based on water), sold separately
- Consistent, accurate drop sizes with Nalgene fitments, sold separately
- Colored dropper closures available, sold separately
- Leakproof†

**Ordering Information:** Dropper Bottles are bulk packed 2000 per case. Order Nalgene controlled-drop dispensing tip (Cat. Nos. 312758, 312759) and colored closures (Cat. No. 312760) separately.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Dropper Bottles meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. White LDPE Bottles meet the requirements for light-resistant containers per USP current edition.

### Nalgene Dropper Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312750-9125	4 (1/8)	15-415	10	20	54	2000	2000
312750-9025	8 (1/4)	15-415	10	20	65	2000	2000
312750-9050	15 (1/2)	15-415	10	25	75	2000	2000

### Nalgene Dropper Bottles; white low-density polyethylene

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312751-9125	4 (1/8)	15-415	10	20	54	2000	2000
312751-9025	8 (1/4)	15-415	10	20	65	2000	2000
312751-9050	15 (1/2)	15-415	10	25	75	2000	2000



## ► Thermo Scientific Nalgene Closures for Dropper Bottles

polypropylene, bulk pack



### Nalgene™ PP Closures for Dropper Bottles (Cat. Nos. 312750 and 312751).

Must be ordered to complete Dropper Bottle System. Available in multiple colors to help identify reagents.

#### details

- Polypropylene
- Available in natural, white, yellow, green, red and blue to help color code your diagnostic reagents

**Ordering Information:** Dropper Bottle Closures are bulk packed 2000 per case. Order Nalgene controlled-drop dispensing tip (Cat. Nos. 312758, 312759) and dropper bottles (Cat. Nos. 312750, 312751) separately.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Dropper Bottle Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

#### Nalgene Closures for Dropper Bottles

Cat. No.	Color	Neck Finish, mm	No. per Pack	No. per Case
312760-0000	Natural	15-415	2000	2000
312760-0010	White	15-415	2000	2000
312760-0020	Yellow	15-415	2000	2000
312760-0040	Green	15-415	2000	2000
312760-0050	Red	15-415	2000	2000
312760-0060	Blue	15-415	2000	2000





## ► Thermo Scientific Nalgene Dispensing Tips for Dropper Bottles

low-density polyethylene, bulk pack



### Nalgene™ LDPE Dispensing Tips offer precise drip control.

These dispensing tips are suitable for most biotech and pharmaceutical applications. Use with Nalgene LDPE Dropper bottles and Colored PP Closures.

#### details

- Offered in two drop sizes (40 µL or 50 µL)
- Fits Nalgene Dropper Bottles (Series 312750 and 312751)
- Use with Nalgene dropper closures (Series 31260) for color coding your reagents

**Ordering Information:** Dropper Bottles Dispensing Tips are bulk packed 2000 per case. Order Nalgene dropper bottles (Cat. Nos. 312750, 312751) and colored closure (Cat. No. 312760) separately.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Dropper Bottle dispensing tips meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

#### Nalgene Dispensing Tips for Dropper Bottles

Cat. No.	Vol., µL	Dia., mm	Height, mm	No. per Pack	No. per Case
312759-0001	40	11.2	16.5	2000	2000
312758-0001	50	11.2	16.5	2000	2000

### ► Select the perfect container for your application.

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## ► Thermo Scientific Nalgene Micro Packaging Vials

natural polypropylene copolymer, sterile, bulk pack



**Nalgene™ Sterile Micro Packaging Vials** are molded from high purity, non-cytotoxic, non-pyrogenic, low-metal content polypropylene copolymer (PPCO) resin.

Vials are skirted (except 1.5 mL size) and feature a conical bottom, allowing recovery of entire contents. Several closure options exist to customize the final product.

### details

- Vials and closures (listed separately) are pressure-tested together at 7.5 PSIG for air shipment
- USP Class VI compliant; non-pyrogenic
- Can be centrifuged at 13,000 xg
- Components are provided sterile and ready to fill
- Colored closures packaged separately
- Sterile to  $10^{-6}$  SAL
- RNase/DNase Free
- Leakproof<sup>†</sup> when used with Nalgene closures

#### 0.5, 2.0 and 4.5 mL Vials

- Skirted, with conical interior

#### 1.5 mL Vial

- Conical design

**Ordering Information:** Micro Packaging Vials are bulk packed without closures, 500 per inner bag, 1000 per case. Order sterile closures separately (Cat. Nos. 342820, 342821, 342825, 342826, 342830).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Micro Packaging Vials

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height* with Closure, mm	No. per Pack	No. per Case
342800-0005	0.5	11	8	13	49	500	1000
342800-0015	1.5	11	8	13	47	500	1000
342800-0020	2	11	8	13	49	500	1000
342800-0045	4.5	13	9	12	77	500	1000

\* Height of high-profile closure assembled



## ► Thermo Scientific Nalgene Micro Packaging Vials

polypropylene copolymer, sterile, e-beam Irradiation, bulk pack



**Nalgene™ Sterile Micro Packaging Vials** are molded from high purity, non-cytotoxic, non-pyrogenic, low-metal content polypropylene copolymer (PPCO) resin.

Vials are skirted and feature a conical bottom, allowing recovery of entire contents.

### details

- Vials and closures (listed separately) are pressure-tested together at 7.5 PSIG for air shipment
- USP Class VI compliant; non-pyrogenic
- Skirted, with conical interior
- Can be centrifuged at 13,000 ×g
- RNase/DNase Free
- Components are provided sterile (e-beam irradiation) and ready to fill
- Sterile to 10<sup>-6</sup> SAL
- Colored closures packaged separately
- Leakproof† when used with Nalgene closures

**Ordering Information:** Micro Packaging Vials are bulk packed without closures, 500 per inner bag, 1000 per case. Order e-beam closures separately (Cat. No. 342830).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Micro Packaging Vials

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height* with Closure, mm	No. per Pack	No. per Case
342810-0005	0.5	11	8	13	49	500	1000
342810-0020	2	11	8	13	49	500	1000

\* Height of high-profile closure assembled





## ► Thermo Scientific Nalgene Micro Packaging Vials

natural polypropylene copolymer, non-sterile, bulk pack



**Nalgene™ Non-Sterile Micro Packaging Vials** are molded from high purity, non-cytotoxic, non-pyrogenic, low-metal content polypropylene copolymer (PPCO) resin.

Vials are skirted (except 1.5 mL size) and feature a conical bottom, allowing recovery of entire contents.

### details

- Vials and closures (listed separately) are pressure-tested together at 7.5 psig for air shipment
- USP Class VI compliant; non-pyrogenic
- Can be centrifuged at 13,000 ×g
- Colored closures packaged separately
- Non-sterile
- Leakproof† when used with Nalgene closures

#### 0.5, 2.0 and 4.5 mL Vials

- Skirted, with conical interior

#### 1.5 mL Vial

- Conical design

**Ordering Information:** Micro Packaging Vials are bulk packed without closures, 500 per inner bag, 1000 per case. Order non-sterile closures separately (Cat. Nos. 362820, 362821, 362825, 362826, 362830).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Micro Packaging Vials

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height* with Closure, mm	No. per Pack	No. per Case
362800-0005	0.5	11	8	13	49	500	1000
362800-0015	1.5	11	8	13	47	500	1000
362800-0020	2.0	11	8	13	49	500	1000
362800-0045	4.5	11	8	13	77	500	1000

\* Height of high-profile closure assembled



## ▶ Thermo Scientific Nalgene Micro Packaging Vials

amber polypropylene copolymer, sterile, bulk pack



**Nalgene™ Sterile Micro Packaging Vials** are molded from high purity, non-cytotoxic, non-pyrogenic, low-metal content polypropylene copolymer (PPCO) resin.

Vials are skirted and feature a conical bottom, allowing recovery of entire contents. Amber vials are suitable for use with products that are light sensitive.

### details

- Vials and closures (listed separately) are pressure-tested together at 7.5 PSIG for air shipment
- USP Class VI compliant; non-pyrogenic
- Can be centrifuged at 13,000 ×g
- Components are provided sterile and ready to fill
- Colored closures packaged separately
- Amber vials provide protection for light-sensitive reagents
- Sterile to 10<sup>-6</sup> SAL
- RNase/DNase Free
- Leakproof† when used with Nalgene closures

**Ordering Information:** Micro Packaging Vials are bulk packed without closures, 500 per inner bag, 1000 per case. Order sterile closures separately (Cat. Nos. 342821, 342825).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Amber Micro Packaging Vials meet the requirements for light-resistant containers per USP current edition when used with amber closures.

### Nalgene Micro Packaging Vials

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height* with Closure, mm	No. per Pack	No. per Case
342805-0005	0.5	11	8	13	49	500	1000
342805-0020	2	11	8	13	49	500	1000

\* Height of high-profile closure assembled

## ▶ Thermo Scientific Nalgene Micro Packaging Vials

amber polypropylene copolymer, non-sterile, bulk pack



**Nalgene™ Non-Sterile Micro Packaging Vials** are molded from high purity, non-cytotoxic, non-pyrogenic, low-metal content polypropylene copolymer (PPCO) resin.

Vials are skirted and feature a conical bottom, allowing recovery of entire contents.

Amber vials can be used to protect light-sensitive reagents.

### details

- Vials and closures (listed separately) are pressure-tested together at 7.5 psig for air shipment
- USP Class VI compliant; non-pyrogenic
- Can be centrifuged at 13,000 ×g
- Colored closures packaged separately
- Non-sterile
- Leakproof† when used with Nalgene closures

**Ordering Information:** Micro Packaging Vials are bulk packed without closures, 500 per inner bag, 1000 per case. Order non-sterile closures separately (Cat. Nos. 362821, 362825).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Amber Micro Packaging Vials meet the requirements for light-resistant containers per USP current edition when used with amber closures.

### Nalgene Micro Packaging Vials

Cat. No.	Capacity, mL	Closure Size, mm	Neck I.D., mm	O.D., mm	Height* with Closure, mm	No. per Pack	No. Per Case
362805-0005	0.5	11	8	13	49	500	1000
362805-0020	2.0	11	8	13	49	500	1000

\* Height of high-profile closure assembled



## ► Thermo Scientific Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

polypropylene copolymer, sterile, bulk pack



**Nalgene™ PPCO Closures with Color Coders have no o-ring to fall out or contaminate contents.**

Our closures are offered in a variety of colors for quick identification.

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- Threaded, screw closure
- Permanently attached, color-coded inserts are free of toxic heavy metals
- Inserts do not come in contact with vial contents
- Sterile to  $10^{-6}$  SAL
- RNase/DNase Free
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order sterile vials separately (Cat. Nos. 342800, 342805).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

Cat. No.	Coder Color	Neck Finish, mm	No. per Pack	No. per Case.
342820-0110	No Coder	11	500	1000
342820-0111	White	11	500	1000
342820-0112	Yellow	11	500	1000
342820-0113	Orange	11	500	1000
342820-0114	Green	11	500	1000
342820-0115	Red	11	500	1000
342820-0116	Blue	11	500	1000
342820-0117	Gold	11	500	1000
342820-0118	Purple	11	500	1000
342820-0119	Natural	11	500	1000
342820-1110	Teal	11	500	1000

## ► Thermo Scientific Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

polypropylene copolymer, non-sterile, bulk pack



**Nalgene™ PPCO Closures with Color Coders have no o-ring to fall out or contaminate contents. Our closures are offered with a variety of color coders.**

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- Threaded, screw closure
- Permanently attached, color-coded inserts are free of toxic heavy metals
- Inserts do not come in contact with vial contents
- Non-sterile
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order sterile vials separately (Cat. Nos. 342800, 342805).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

Cat. No.	Coder Color	Neck Finish, mm	No. per Pack	No. per Case
362820-0110	No Coder	11	500	1000
362820-0111	White	11	500	1000
362820-0112	Yellow	11	500	1000
362820-0113	Orange	11	500	1000
362820-0114	Green	11	500	1000
362820-0115	Red	11	500	1000
362820-0116	Blue	11	500	1000
362820-0117	Gold	11	500	1000
362820-0118	Purple	11	500	1000
362820-0119	Natural	11	500	1000
362820-1110	Teal	11	500	1000



## ► Thermo Scientific Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

high-density polyethylene, e-beam sterile, bulk pack



**Nalgene™ HDPE closures for micro packaging vials have no o-ring to fall out or contaminate contents.**

These closures are provided sterile and are for use with our sterile micro packaging vials.

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- Threaded screw closure fits Nalgene micro packaging vials
- Permanently attached color coded inserts do not come in contact with vial contents and are free of toxic heavy metals
- Sterile to  $10^{-6}$  SAL
- Non-cytotoxic, non-pyrogenic
- RNase/DNase Free
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order e-beam sterile vials separately (Cat. No. 342810).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

Cat. No.	Coder Color	Neck Finish, mm	No. per Pack	No. per Case
342830-0110	No coder	11	500	1000
342830-0111	White	11	500	1000
342830-0112	Yellow	11	500	1000
342830-0113	Orange	11	500	1000
342830-0114	Green	11	500	1000
342830-0115	Red	11	500	1000
342830-0116	Blue	11	500	1000
342830-0117	Gold	11	500	1000
342830-0118	Purple	11	500	1000
342830-0119	Natural	11	500	1000
342830-1110	Teal	11	500	1000
342830-5110	Light Tan	11	500	1000
342830-5114	Light Green	11	500	1000
342830-5116	Light Blue	11	500	1000
342830-5118	Light Purple	11	500	1000



## ► Thermo Scientific Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

high-density polyethylene, non-sterile, bulk pack



**Nalgene™ HDPE Closures with Color Coders have no o-ring to fall out or contaminate contents.**

Our closures are offered in a variety of colors for quick identification.

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- Threaded, screw closure
- Permanently attached, color-coded inserts are free of toxic heavy metals
- Inserts do not come in contact with vial contents
- Non-cytotoxic, non-pyrogenic
- Non-sterile
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order non-sterile vials separately (Cat. Nos. 362800, 362805).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

Cat. No.	Coder Color	Neck Finish, mm	No. per Pack	No. per Case
362830-0110	No Coder	11	500	1000
362830-0111	White	11	500	1000
362830-0112	Yellow	11	500	1000
362830-0113	Orange	11	500	1000
362830-0114	Green	11	500	1000
362830-0115	Red	11	500	1000
362830-0116	Blue	11	500	1000
362830-0117	Gold	11	500	1000
362830-0118	Purple	11	500	1000
362830-0119	Natural	11	500	1000
362830-1110	Teal	11	500	1000
362830-5110	Light Tan	11	500	1000
362830-5114	Light Green	11	500	1000
362830-5116	Light Blue	11	500	1000
362830-5118	Light Purple	11	500	1000



## ► Thermo Scientific Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

amber polypropylene copolymer, sterile, bulk pack



**Nalgene™ Amber PPCO Closures with Color Coders have no o-ring to fall out or contaminate contents. Our closures are offered with a variety of color coders for quick identification.**

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- Use with amber PPCO micro packaging vials to provide barrier for light-sensitive reagents
- Threaded, screw closure
- Permanently attached, color-coded inserts are free of toxic heavy metals
- Inserts do not come in contact with vial contents
- Non-cytotoxic and non-pyrogenic
- Sterile to  $10^{-6}$  SAL
- RNase/DNase Free
- Leakproof<sup>†</sup> when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order sterile amber vials separately (Cat. No. 342805).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Amber Micro Packaging Vial Closures meet the requirements for light-resistant containers per USP current edition when used with amber vials.

### Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

Cat. No.	Coder Color	Neck Finish, mm	No. per Pack	No. per Case
342825-0110	No Coder	11	500	1000
342825-0111	White	11	500	1000
342825-0112	Yellow	11	500	1000
342825-0113	Orange	11	500	1000
342825-0114	Green	11	500	1000
342825-0115	Red	11	500	1000
342825-0116	Blue	11	500	1000
342825-0117	Gold	11	500	1000
342825-0118	Purple	11	500	1000
342825-0119	Natural	11	500	1000
342825-1110	Teal	11	500	1000
342825-1111	Amber	11	500	1000

## ► Thermo Scientific Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

amber polypropylene copolymer, non-sterile



**Nalgene™ PPCO Closures with Color Coders have no o-ring to fall out or contaminate contents. Our closures are offered with a variety of color coders for quick identification.**

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- Use with amber PPCO micro packaging vials to provide barrier for light-sensitive reagents
- Threaded, screw closure
- Permanently attached, color-coded inserts are free of toxic heavy metals
- Inserts do not come in contact with vial contents
- Non-cytotoxic and non-pyrogenic
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order non-sterile amber vials separately (Cat. No. 362805).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Amber Micro Packaging Vial Closures meet the requirements for light-resistant containers per USP current edition when used with amber vials.

### Nalgene High Profile Closures with Color Coders for Micro Packaging Vials

Cat. No.	Coder Color	Neck Finish, mm	No. per Pack	No. per Case
362825-0111	White	11	500	1000
362825-0112	Yellow	11	500	1000
362825-0113	Orange	11	500	1000
362825-0114	Green	11	500	1000
362825-0115	Red	11	500	1000
362825-0116	Blue	11	500	1000
362825-0117	Gold	11	500	1000
362825-0118	Purple	11	500	1000
362825-0119	Natural	11	500	1000
362825-1110	Teal	11	500	1000
362825-1111	Amber	11	500	1000



## ► Thermo Scientific Nalgene Low Profile Closures for Micro Packaging Vials

polypropylene copolymer, sterile, bulk pack



**Nalgene™ PPCO Low Profile Micro Packaging Vial Closures are offered in a variety of colors for quick identification.**

Leakproof closures are molded of high-purity, low metal-content polypropylene copolymer (PPCO) resin – excellent for PCR reagents.

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- PPCO
- Low profile
- Sterile to  $10^{-6}$  SAL
- Non-cytotoxic and non-pyrogenic
- RNase/DNase Free
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order sterile vials separately (Cat. Nos. 342800, 342805).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Low Profile Closures for Micro Packaging Vials

Cat. No.	Closure Color	Neck Finish, mm	No. per Pack	No. per Case
342821-0110	Natural	11	500	1000
342821-0111	White	11	500	1000
342821-0112	Yellow	11	500	1000
342821-0114	Green	11	500	1000
342821-0115	Red	11	500	1000
342821-0116	Blue	11	500	1000
342821-0118	Purple	11	500	1000
342821-1111	Amber	11	500	1000

## ► Thermo Scientific Nalgene Low Profile Closures for Micro Packaging Vials

polypropylene copolymer, non-sterile, bulk pack



**Nalgene™ PPCO Low-Profile Micro Packaging Vial Closures are offered in a variety of colors for quick identification.**

Leakproof closures are molded of high-purity, low metal-content polypropylene copolymer (PPCO) resin – excellent for PCR reagents.

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- PPCO
- Low profile
- Non-sterile
- Non-cytotoxic and non-pyrogenic
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order non-sterile vials separately (Cat. Nos. 362800, 362805).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Low Profile Closures for Micro Packaging Vials

Cat. No.	Closure Color	Neck Finish, mm	No. per Pack	No. per Case
362821-0110	Natural	11	500	1000
362821-0111	White	11	500	1000
362821-0112	Yellow	11	500	1000
362821-0114	Green	11	500	1000
362821-0115	Red	11	500	1000
362821-0116	Blue	11	500	1000
362821-0118	Purple	11	500	1000
362821-1111	Amber	11	500	1000
362821-1112	Pink	11	500	1000



## ► Thermo Scientific Nalgene Micro Packaging Vial Closures for 4.5 mL Vials

polypropylene copolymer, sterile, bulk pack



**Nalgene™ PPCO Micro Packaging Vial Closures have no o-ring to fall out or contaminate contents.**

Green, white or natural colored closures specifically designed for the 4.5 mL micro packaging vial.

### details

- Vials (listed separately) and closures are pressure-tested together at 7.5 psig for air shipment
- PPCO
- Sterile
- Non-cytotoxic and non-pyrogenic
- RNase/DNase Free
- Leakproof† when used with Nalgene Micro Packaging Vials

**Ordering Information:** Micro Packaging Vial Closures are bulk packed without vials, 500 per inner bag, 1000 per case. Order sterile vials separately Cat. No. (342800-0045).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Micro Packaging Vials and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Micro Packaging Vial Closures for 4.5 mL Vials

Cat. No.	Closure Color	Neck Finish, mm	No. per Pack	No. per Case
342826-0110	Natural	13	500	1000
342826-0111	White	13	500	1000
342826-0114	Green	13	500	1000
362826-0111*	White	13	500	1000

\* Non-sterile



## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

natural high-density polyethylene with polypropylene closures, bulk pack



**Nalgene™ HDPE Narrow-Mouth Packaging Bottles** are ideal for specialty chemicals, diagnostics, biologicals, reagents, adhesives and veterinary pharmaceuticals.

Narrow-mouth HDPE packaging bottles are excellent for storage, shipping and packaging of liquid reagents.

### details

- Injection blow-molded for uniform wall thickness and strength
- Made from high-purity, food-grade resins
- Tough plastic construction
- Polypropylene closures included
- Leakproof†

**Recommended for:** Storage and shipment of liquid reagents.

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312089-0001	30 (1)	20	14	34	61	1000	1000
312089-0002	60 (2)	20	14	39	86	1000	1000
312089-0004	125 (4)	24	18	50	104	500	500
312089-0008	250 (8)	24	18	61	133	250	250
312089-0016	500 (16)	28	21	73	171	125	125
312089-0032	1000 (32)	38-430	27	92	217	50	50

### ► Select the perfect container for your application.

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## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

natural high-density polyethylene with polypropylene closures, shrink-wrapped tray packed



**Nalgene™ HDPE Narrow-Mouth Packaging Bottles are packed in shrink-wrapped trays and include polypropylene closures.**

Bottles in shrink-wrap trays are ready to feed into filling lines for various reagents.

### details

- Rigid, lint-free trays
- Bottles are packed in rigid trays, providing easy handling
- Natural HDPE with polypropylene closures
- Leakproof†

**Ordering Information:** Bottles are packed in shrink-wrapped trays with closures packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Packaging Bottles with Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
322089-0001	30 (1)	20	14	34	61	70	1050
322089-0002	60 (2)	20	14	39	86	70	1050
322089-0004	125 (4)	24	18	50	104	30	300
322089-0008	250 (8)	24	18	61	133	30	300

## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles without Closures

natural high-density polyethylene, bulk pack



**Nalgene™ Narrow-Mouth Packaging Bottles without closures are translucent HDPE and feature a narrow mouth.**

Bottles are packed without closures so they can be matched with various colored closures (Cat. No. 362150).

### details

- Natural HDPE
- Order Nalgene closures separately, see catalog number 362150 series
- Leakproof† when used with Nalgene closures

**Ordering Information:** Bottles are bulk packed without closures. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Packaging Bottles without Closures

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362089-0001	30 (1)	20	14	34	61	1000	1000
362089-0002	60 (2)	20	14	37	85	1000	1000
362089-0004	125 (4)	24	18	50	101	500	500
362089-0008	250 (8)	24	18	61	133	250	250
362089-0016	500 (16)	28	21	73	170	125	125
362089-0032	1000 (32)	38-430	27	91	216	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

natural high-density polyethylene with white polypropylene closure, sterile, shrink-wrapped tray packed



**Nalgene™ HDPE Narrow-Mouth Sterile Bottles provide excellent chemical resistance.**

Bottles are manufactured and packed in a controlled environment to minimize biological and particulate contamination.

### details

- Shrink-wrapped trays are packed in double-polybagged cartons
- Durable construction
- Narrow mouth for easy pouring
- Natural HDPE bottles with white PP closures
- Sterile
- $10^{-6}$  SAL
- Leakproof†

**Ordering Information:** Bottles are packed in shrink-wrapped trays with closures assembled.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342089-0001	30 (1)	20	14	34	61	54	864
342089-0002	60 (2)	20	14	39	86	45	540
342089-0004	125 (4)	24	18	50	104	24	240
342089-0008	250 (8)	24	18	61	133	30	180
342089-0016	500 (16)	28	21	73	171	20	120
342089-0032	1000 (32)	38-430	27	92	217	12	24

## ► Thermo Scientific Nalgene Wide-Mouth Packaging Bottles with Closures

natural high-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ HDPE Wide-Mouth Packaging Bottles with polypropylene closures are injection blow-molded for strength and uniform wall thickness.**

Durable, leakproof<sup>†</sup> chemical resistant bottles designed for shipping and storage.

### details

- Wide mouth for easy filling and dispensing of reagents
- Tough plastic construction
- Made from high-purity, food-grade resins
- Leakproof<sup>†</sup>

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Wide-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312189-0001	30 (1)	28	21	34	63	1000	1000
312189-0002	60 (2)	28	21	38	86	1000	1000
312189-0004	125 (4)	38	28	51	100	500	500
312189-0008	250 (8)	43	33	61	131	250	250
312189-0016	500 (16)	53	44	73	168	125	125
312189-0032	1000 (32)	63	52	91	199	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

translucent amber high-density polyethylene with opaque amber polypropylene closures, bulk pack



**Nalgene™ translucent amber HDPE Narrow-Mouth Packaging Bottles have a robust construction for packaging use and are featured with amber polypropylene closures.**

Translucent amber narrow-mouth packaging bottles are designed for storage, shipping and packaging of light-sensitive liquids.

### details

- Excellent impact and chemical resistance
- Include opaque amber polypropylene closures
- Translucent amber bottles provide light protection with the ability to see liquid level
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312084-0001	30 (1)	20	14	34	61	1000	1000
312084-0002	60 (2)	20	14	37	85	1000	1000
312084-0004	125 (4)	24	18	50	101	500	500
312084-0008	250 (8)	24	18	61	133	250	250
312084-0016	500 (16)	28	21	73	170	125	125
312084-0032	1000 (32)	38-430	27	91	216	50	50







## ► Thermo Scientific Nalgene Wide-Mouth Packaging Bottles with Closures

translucent amber high-density polyethylene with opaque amber polypropylene closure, bulk pack



**Nalgene™ HDPE Translucent Amber Wide-Mouth Packaging Bottles meet the requirements of light-resistant containers per USP latest edition.**

Protection from UV light combined with the easy filling of a wide-mouth bottle.

### details

- Translucent Amber HDPE Bottle
- Opaque Amber PP Closure
- Protects light-sensitive products while allowing to see contents
- Wide mouth allows easy filling and dispensing of liquids and powders
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Wide-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312184-0001	30 (1)	28	21	34	63	1000	1000
312184-0002	60 (2)	28	21	39	86	1000	1000
312184-0004	125 (4)	38	28	50	99	500	500
312184-0008	250 (8)	43	33	61	131	250	250
312184-0016	500 (16)	53	44	73	168	125	125
312184-0032	1000 (32)	63	53	91	199	50	50





## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

opaque amber high-density polyethylene with opaque amber polypropylene closure, bulk pack



### Nalgene™ HDPE Amber Packaging Bottles with amber PP closures and narrow mouths.

HDPE packaging bottles are ideal for diagnostics, biologicals, specialty chemicals, reagents, adhesives and veterinary pharmaceuticals.

#### details

- Injection blow-molded for uniform wall thickness and strength
- Opaque amber HDPE Bottle with opaque amber PP Closure
- Meets USP light transmission standards
- Tough plastic construction
- Bulk packed for packaging applications
- Leakproof†

**Recommended for:** For storage and shipping of light-sensitive reagents.

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

#### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312085-0001	30 (1)	20	14	34	61	1000	1000
312085-0002	60 (2)	20	14	37	85	1000	1000
312085-0004	125 (4)	24	18	50	101	500	500
312085-0008	250 (8)	24	18	61	133	250	250
312085-0016	500 (16)	28	21	73	170	125	125
312085-0032	1000 (32)	38-430	27	91	216	50	50

## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

opaque amber high-density polyethylene with opaque amber polypropylene closure in shrink-wrap trays



**Nalgene™ HDPE Narrow-Mouth amber bottles are packed in shrink-wrapped trays and include amber polypropylene closures.**

Bottles in shrink-wrap trays are ready to feed into filling lines for various reagents.

### details

- Opaque amber container provides protection for light-sensitive reagents
- Bottles are packed in rigid trays, allowing for easy handling
- Opaque amber HDPE with opaque amber polypropylene closures
- Leakproof†

**Ordering Information:** Bottles are packed in shrink-wrapped trays with closures packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
322085-0001	30 (1)	20	14	34	61	70	1050
322085-0002	60 (2)	20	14	37	85	70	1050
322085-0004	125 (4)	24	18	50	101	30	300
322085-0008	250 (8)	24	18	61	133	30	300



## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles without Closures

opaque amber high-density polyethylene, bulk pack



**Nalgene™ opaque amber HDPE Narrow-Mouth Packaging Bottles without closures meet the requirements of light-resistant containers per USP latest edition.**

Amber HDPE bottles can be used to pack valuable light-sensitive reagents. These bottles are packed without closures so they can be matched with various colored closures (Cat. No. 362150).

### details

- Opaque amber HDPE Bottles without closures
- Meet USP requirements of light-resistant containers
- Closures available separately (Cat. No. 362150)
- Leakproof† with appropriate Nalgene closure

**Ordering Information:** Bottles are bulk packed without closures. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition when used with colored closures.

### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362085-0001	30 (1)	20	14	34	61	1000	1000
362085-0002	60 (2)	20	14	37	85	1000	1000
362085-0004	125 (4)	24	18	50	101	500	500
362085-0008	250 (8)	24	18	61	133	250	250
362085-0016	500 (16)	28	21	73	170	125	125
362085-0032	1000 (32)	38-430	28	91	213	50	50

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## ► Thermo Scientific Nalgene Wide-Mouth Packaging Bottles with Closures

opaque amber high-density polyethylene with opaque amber polypropylene closure, bulk pack



**Nalgene™ HDPE Opaque Amber Wide-Mouth Packaging Bottles meet the requirements of light-resistant containers per USP latest edition.**

Protection from UV light combined with the easy filling of a wide-mouth bottle.

### details

- Opaque amber HDPE bottle
- Opaque amber polypropylene closure
- Bulk-pack
- Wide mouth allows easy filling and dispensing of liquids and powders
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Wide-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312185-0001	30 (1)	28	21	34	63	1000	1000
312185-0002	60 (2)	28	21	39	86	1000	1000
312185-0004	125 (4)	38	28	50	99	500	500
312185-0008	250 (8)	43	33	61	131	250	250
312185-0016	500 (16)	53	44	73	168	125	125
312185-0032	1000 (32)	63	53	91	199	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

natural low-density polyethylene with polypropylene closures, bulk pack



**Nalgene™ LDPE Narrow-Mouth Packaging Bottles** have a robust construction for packaging use and are featured with polypropylene closures.

Narrow-mouth packaging bottles are designed for storage, shipping and packaging of liquid reagents.

### details

- Excellent flexibility, impact resistance and clarity
- Natural, low-density polyethylene
- Includes natural, polypropylene closures
- Ideal material for trace metal analysis due to LDPE low trace metal content
- Durable construction – narrow mouth for easy pouring
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312088-0001	30 (1)	20	14	34	61	1000	1000
312088-0002	60 (2)	20	14	37	85	1000	1000
312088-0004	125 (4)	24	18	50	101	500	500
312088-0008	250 (8)	24	18	61	133	250	250
312088-0016	500 (16)	28	21	73	170	125	125
312088-0032	1000 (32)	38-430	27	91	216	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Packaging Bottles with Closures

polypropylene copolymer with polypropylene closures, bulk pack



**Nalgene™ PPCO Narrow-Mouth Packaging Bottles have a robust construction for packaging use and are featured with polypropylene closures.**

Narrow-mouth packaging bottles are designed for storage, shipping and packaging of liquid reagents.

### details

- Excellent clarity, impact and chemical resistance
- Natural, translucent polypropylene copolymer
- Autoclavable
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312087-0001	30 (1)	20	14	34	61	1000	1000
312087-0002	60 (2)	20	14	37	85	1000	1000
312087-0004	125 (4)	24	18	50	101	500	500
312087-0008	250 (8)	24	18	61	133	250	250
312087-0016	500 (16)	28	21	73	170	125	125
312087-0032	1000 (32)	38-430	27	91	216	50	50



## ► Thermo Scientific Nalgene Wide-Mouth Packaging Bottles with Closures

natural polypropylene copolymer with polypropylene closure, bulk pack



**Nalgene™ PPCO Wide-Mouth Packaging Bottles with polypropylene closures are ideal for diagnostics, biologicals, specialty chemicals, reagents, adhesives and veterinary pharmaceuticals.**

Durable, leakproof, autoclavable bottles are designed for shipping and storage.

### details

- Wide mouth allows easy filling and dispensing of powders
- Injection blow-molded for uniform wall thickness and strength
- Made from high-purity, food-grade resins; no plasticizers, fillers or extenders
- Polypropylene closures included
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Wide-Mouth Packaging Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312187-0001	30 (1)	28	21	34	63	1000	1000
312187-0002	60 (2)	28	21	39	86	1000	1000
312187-0004	125 (4)	38	28	50	99	500	500
312187-0008	250 (8)	43	33	61	131	250	250
312187-0016	500 (16)	53	44	73	168	125	125
312187-0032	1000 (32)	63	53	91	199	50	50





## ► Thermo Scientific Nalgene Narrow-Mouth Boston Round Bottles with Closures

high-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ all-purpose Boston Round HDPE Bottles with PP closures are highly reliable and durable for long-term use.**

Ideal for packaging and shipping liquids, with excellent chemical resistance.

### details

- Non-sterile
- Natural, translucent high-density polyethylene
- Natural, linerless polypropylene closures
- Durable, uniform walls are resistant to splitting or puncturing
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

**Nalgene Narrow-Mouth Boston Round Bottles**

Cat No	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312002-0001	30 (1)	20	14	34	61	1000	1000
312002-0002	60 (2)	20	14	37	85	1000	1000
312002-0004	125 (4)	24	18	50	101	500	500
312002-0006	175 (6)	24	18	54	125	250	250
312002-0008	250 (8)	24	18	61	133	250	250
312002-0016	500 (16)	28	21	74	170	125	125
312002-0032	1000 (32)	38-430	27	91	216	50	50





## ► Thermo Scientific Nalgene Narrow-Mouth Boston Round Bottles without Closures

high-density polyethylene, bulk pack



**Nalgene™ HDPE Boston Round Bottles are specifically designed for demanding packaging applications.**

Reliable, durable bottles are rigid and translucent with excellent chemical resistance. These bottles are packed without closures so they can be matched with various colored closures (Cat. No. 362150).

### details

- Natural, HDPE
- Durable uniform walls are resistant to splitting or puncturing
- Rigid and translucent, with excellent chemical resistance
- Leakproof†, when assembled with Nalgene closure (must be ordered separately)

**Ordering Information:** Bottles are bulk packed without closures. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Boston Round Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362002-0001	30 (1)	20	14	34	61	1000	1000
362002-0002	60 (2)	20	14	37	85	1000	1000
362002-0004	125 (4)	24	18	50	101	500	500
362002-0008	250 (8)	24	18	61	133	250	250
362002-0016	500 (16)	28	21	73	170	125	125
362002-0032	1000 (32)	38-430	27	91	216	50	50



## ► Thermo Scientific Nalgene Rectangular Bottles with Closures

high-density polyethylene with polypropylene closures, bulk pack



**Nalgene™ HDPE Rectangular Bottles with PP closure feature a space-saving rectangular design.**

A good choice where space is at a premium.

### details

- Uniform walls are resistant to splitting or puncturing
- Natural HDPE Bottle with PP Closure
- Bulk-packed for packaging applications
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Rectangular Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312007-0004	125 (4)	28	21	21	102	500	500
312007-0008	250 (8)	38	28	28	117	250	250
312007-0016	500 (16)	48	37	37	147	125	125
312007-0032	1000 (32)	53	44	44	180	50	50



## ► Thermo Scientific Nalgene Graduated Square Bottles with Closures

high-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ HDPE Graduated Square Bottles with PP Closures are translucent and provide visible liquid levels.**

Square bottles with polypropylene closures feature a space-saving design.

### details

- Natural, high-density polyethylene
- Natural polypropylene screw closure
- Molded-in graduations for easy measuring
- Drip-proof neck finish for convenient dispensing
- Chemical-resistant and break-resistant
- Not autoclavable

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Graduated Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312018-0125	125 (4)	38-430	28	54 Square	110	250	250
312018-0250	250 (8)	38-430	28	61 Square	146	250	250
312018-0500	500 (16)	38-430	28	74 Square	177	125	125
312018-1000	1000 (32)	38-430	28	94 Square	220	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Bottles with Closures

fluorinated high-density polyethylene, fluorinated polypropylene closure, bulk pack



**Nalgene™ HDPE Fluorinated Bottles are effective for packaging solvents, oils, chemicals and agricultural products.**

Fluorinating these HDPE bottles provides a cost-effective alternative to costly fluoropolymer containers.

### details

- Fluorinated high-density polyethylene
- Resists permeation, paneling, odor emission, flavor and fragrance loss
- Uniform walls are resistant to splitting and puncturing
- Fluorinated PP closures

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Fluorinated Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312097-0004	125 (4)	24	18	50	101	500	500
312097-0008	250 (8)	24	18	61	133	250	250
312097-0016	500 (16)	28	21	73	170	125	125
312097-0032	1000 (32)	38-430	27	91	216	50	50



## ► Thermo Scientific Nalgene Wide-Mouth Bottles with Closures

natural high-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ HDPE Wide-Mouth Bottles and PP Closures feature a wide mouth for ease of filling and dispensing.**

### details

- Natural high-density polyethylene with natural polypropylene closures
- Excellent chemical resistance
- Uniform walls resist splitting and puncturing
- Wide mouth for easy filling and dispensing
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312104-0001	30 (1)	28	21	34	63	1000	1000
312104-0002	60 (2)	28	21	39	86	1000	1000
312104-0004	125 (4)	38	28	50	99	500	500
312104-0008	250 (8)	43	33	61	131	250	250
312104-0016	500 (16)	53	44	73	168	125	125
312104-0032	1000 (32)	63	53	91	199	50	50



## ► Thermo Scientific Nalgene Wide-Mouth Square Bottles

high-density polyethylene, polypropylene screw closures, bulk pack



**Nalgene™ HDPE Wide-Mouth Square Bottles with polypropylene closures feature durable, uniform walls resistant to splitting or puncturing.**

Easy-to-grip bottles save valuable storage space.

### details

- Wide mouth for easy filling and pouring
- Square shape saves shelf space
- Durable, uniform walls are resistant to splitting or puncturing
- Linerless polypropylene caps
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Wide-Mouth Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312114-0002	60 (2)	28	21	36 Square	83	1000	1000
312114-0006	125 (4)	38	28	51 Square	106	250	250
312114-0008	250 (8)	43	33	61 Square	116	250	250
312114-0016	500 (16)	53	43	74 Square	146	125	125
312114-0032	1000 (32)	63	53	95 Square	181	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Boston Round Bottles with Closures

opaque amber high-density polyethylene with opaque amber polypropylene closure, bulk pack



**Nalgene™ HDPE Narrow-Mouth Amber Bulk Packed Boston Round Bottles with Amber PP closures are ideal for packaging applications.**

Opaque amber bottles reduce UV light transmission to protect light-sensitive reagents.

### details

- Opaque amber HDPE narrow-mouth bottles with opaque amber polypropylene closure
- Uniform walls are resistant to splitting or puncturing
- Linerless caps included
- Bulk-packed for packaging applications
- Complies with USP requirements for light-resistant containers
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Narrow-Mouth Boston Round Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312004-0001	30 (1)	20	14	34	61	1000	1000
312004-0002	60 (2)	20	14	37	85	1000	1000
312004-0004	125 (4)	24	18	50	101	500	500
312004-0008	250 (8)	24	18	61	133	250	250
312004-0016	500 (16)	28	21	73	170	125	125
312004-0032	1000 (32)	38-430	27	91	216	50	50



## ► Thermo Scientific Nalgene Wide-Mouth Bottles with Closures

opaque amber high-density polyethylene with opaque amber polypropylene closure, bulk pack



**Nalgene™ HDPE Wide-Mouth Opaque Amber Bottles with opaque amber PP Closures** are leakproof and have a wide-mouth for ease of filling and dispensing. They are designed for storage, shipping and packaging of light-sensitive reagents.

### details

- Opaque amber HDPE Bottles
- Opaque amber polypropylene closures
- Uniform walls resist splitting and puncturing
- Wide mouth allows easy filling and dispensing
- Bulk packed
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312106-0001	30 (1)	28	21	34	63	1000	1000
312106-0002	60 (2)	28	21	39	86	1000	1000
312106-0004	125 (4)	38	28	50	99	500	500
312106-0008	250 (8)	43	33	61	131	250	250
312106-0016	500 (16)	53	44	73	168	125	125
312106-0032	1000 (32)	63	53	91	199	50	50





## ► Thermo Scientific Nalgene Rectangular Bottles with Closures

opaque amber high-density polyethylene, with opaque amber polypropylene closure, bulk pack



**Nalgene™ HDPE Opaque Amber Rectangular Bottles help protect light-sensitive liquids or dry materials from light exposure.**

Protection from UV light combined with a space-saving rectangular shape.

### details

- Uniform walls are resistant to splitting or puncturing
- Excellent chemical resistance to most acids, bases and alcohols
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Product meets the requirements for light-resistant containers per USP latest edition.

### Nalgene Rectangular Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312009-0004	125 (4)	28	21	61 x 38	102	500	500
312009-0008	250 (8)	38	28	76 x 51	117	250	250
312009-0016	500 (16)	48	37	94 x 58	147	125	125
312009-0032	1000 (32)	53	44	125 x 71	180	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Boston Round Bottles without Closures

opaque white high-density polyethylene without closures, bulk pack



**Nalgene™ HDPE Boston Round Opaque White Bottles are specifically designed for demanding lab and packaging use.**

Reliable, durable bottles are opaque white for light-sensitive products and provide excellent chemical resistance. These bottles are packed without closures so they can be matched with various colored Nalgene closures (Cat. No. 362150).

### details

- Opaque white HDPE
- Meet the requirements of light-resistant containers per USP latest edition
- Durable, uniform walls are resistant to splitting or puncturing
- Rigid and translucent, with excellent chemical resistance
- Leakproof† when assembled with Nalgene closure (must be ordered separately)

**Ordering Information:** Bottles are bulk packed without closures. Order colored closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Boston Round Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362008-0001	30 (1)	20	14	34	61	1000	1000
362008-0002	60 (2)	20	14	37	85	1000	1000
362008-0004	125 (4)	24	18	50	101	500	500
362008-0008	250 (8)	24	18	61	133	250	250
362008-0016	500 (16)	28	21	73	170	125	125
362008-0032	1000 (32)	38-430	27	91	216	50	50

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## ► Thermo Scientific Nalgene Narrow-Mouth Boston Round Bottles with Closures

natural low-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ Narrow-Mouth Boston Round Bottles are constructed from natural LDPE and feature polypropylene closures.**

These low-density polyethylene bottles are ideal for packaging, shipping and storing a variety of reagents.

### details

- Durable construction
- Ideal for trace metal analysis since LDPE is low in trace metal content
- Uniform walls resist splitting and puncturing
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Boston Round Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312003-0001	30 (1)	20	14	34	61	1000	1000
312003-0002	60 (2)	20	14	37	85	1000	1000
312003-0004	125 (4)	24	18	50	101	500	500
312003-0008	250 (8)	24	18	61	133	250	250
312003-0016	500 (16)	28	21	73	170	125	125
312003-0032	1000 (32)	38-430	27	91	216	50	50

## ► Thermo Scientific Nalgene Wide-Mouth Bottles

Natural low-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ LDPE Wide-Mouth Bottles are leakproof and feature PP closures.**

Wide-mouth for ease of filling and dispensing. These translucent bottles offer durability, clarity and chemical resistance.

### details

- Natural LDPE
- Natural polypropylene closures
- Ideal for trace metal analysis due to LDPE low trace metal content
- Uniform walls resist splitting and puncturing
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312103-0001	30 (1)	28	21	34	63	1000	1000
312103-0002	60 (2)	28	21	39	86	1000	1000
312103-0004	125 (4)	38	28	50	99	500	500
312103-0008	250 (8)	43	33	61	131	250	250
312103-0016	500 (16)	53	44	73	168	125	125
312103-0032	1000 (32)	63	53	91	199	50	50



## ► Thermo Scientific Nalgene Narrow-Mouth Boston Round Bottles with Closures natural polypropylene copolymer with polypropylene closure, bulk pack



**Nalgene™ PPCO Narrow-Mouth Boston Round Bottles are leakproof and feature polypropylene closures.**

Round bottles with narrow mouth are translucent, durable and chemical-resistant.

### details

- Durable
- Translucent
- Autoclavable
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Narrow-Mouth Boston Round Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312006-0001	30 (1)	20	14	34	61	1000	1000
312006-0002	60 (2)	20	14	37	85	1000	1000
312006-0004	125 (4)	24	18	50	101	500	500
312006-0008	250 (8)	24	18	61	133	250	250
312006-0016	500 (16)	28	21	73	170	125	125
312006-0032	1000 (32)	38-430	27	91	216	50	50

## ► Thermo Scientific Nalgene Graduated Square Bottles with Closures

natural polypropylene copolymer, with polypropylene closure, bulk pack



**Nalgene™ PPCO Graduated Square Bottles with polypropylene closure are translucent and provide visible liquid levels.**

Square bottles feature a space-saving square design with molded-in graduations.

### details

- Natural, polypropylene copolymer bottles
- Natural, polypropylene screw closure
- Molded-in graduations for easy measuring
- Drip-proof neck finish for convenient dispensing
- Autoclavable
- Resistant to acids, alcohols and bases
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Graduated Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312016-0030	30 (1)	20	14	38 Square	64	1000	1000
312016-0060	60 (2)	24	18	41 Square	83	1000	1000
312016-0125	125 (4)	38-430	28	54 Square	110	250	250
312016-0250	250 (8)	38-430	28	61 Square	146	250	250
312016-0500	500 (16)	38-430	28	74 Square	177	125	125
312016-1000	1000 (32)	38-430	28	94 Square	220	50	50



## ► Thermo Scientific Nalgene Wide-Mouth Bottles with Closures

natural polypropylene copolymer with polypropylene closure, bulk pack



**Nalgene™ PPCO Wide-Mouth Bottles are leakproof and feature polypropylene closures.**

Wide mouth for ease of filling and dispensing. Translucent bottle offers better clarity than HDPE.

### details

- Natural polypropylene copolymer (PPCO) with polypropylene closures
- Wide mouth for easy filling and dispensing
- Uniform walls resist splitting and puncturing
- Autoclavable
- Bulk packed
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312105-0001	30 (1)	28	21	34	63	1000	1000
312105-0002	60 (2)	28	21	39	86	1000	1000
312105-0004	125 (4)	38	28	50	99	500	500
312105-0008	250 (8)	43	33	61	131	250	250
312105-0016	500 (16)	53	44	73	168	125	125
312105-0032	1000 (32)	63	53	91	199	50	50





## ► Thermo Scientific Nalgene Wide-Mouth Square Bottles with Closures

natural polypropylene copolymer, polypropylene screw closures, bulk pack



**Nalgene™ PPCO Wide-Mouth Square PPCO Bottles** feature durable, uniform walls resistant to splitting or puncturing.

Easy-to-grip bottles save valuable storage space.

### details

- Wide mouth for easy filling and pouring
- Square shape saves shelf space
- Durable, uniform walls are resistant to splitting or puncturing
- Linerless polypropylene caps
- Autoclavable
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Wide-Mouth Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312110-0006	175 (6)	38	28	51 Square	102	250	250
312110-0008	250 (8)	43	33	61 Square	116	250	250
312110-0016	500 (16)	53	43	74 Square	146	125	125
312110-0032	1000 (32)	63	53	95 Square	181	50	50

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## ► Thermo Scientific Nalgene Graduated Square Bottles without Closures

polycarbonate without closure, shrink-wrapped tray packed



**Nalgene™ PC polycarbonate Bottles are durable and autoclavable, and feature an easy-to-handle square design.**

Polycarbonate bottles are ideal for storage of aqueous solutions and short-term storage of media. These bottles are packed without closures so they can be matched with various Nalgene colored closures (Cat. No. 362150).

### details

- Transparent
- Easy-to-handle square design
- Autoclavable
- Tough, durable even at low temperatures
- With molded-in graduations and drip-proof neck

**Ordering Information:** Bottles are packed in shrink-wrapped trays in double-polybagged cartons. Order closures separately (Cat. No. 362150).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Graduated Square Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
362015-0125	125 (4)	38-430	28	54 Square	110	24	96
362015-0250	250 (8)	38-430	28	57 Square	146	30	60
362015-0500	500 (16)	38-430	28	74 Square	177	20	40
362015-1000	1000 (32)	38-430	28	94 Square	220	12	24



## ► Thermo Scientific Nalgene IP2 Narrow-Mouth Bottles with Closures

natural high-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ HDPE Narrow-Mouth IP2 Bottles are leakproof, constructed of durable high-density polyethylene and meet ICAO and IATA requirements.**

Safe, economical bottles for those designing, assembling and certifying combination packaging.

### details

- HDPE bottle with PP closure, bulk pack
- Narrow mouth
- Complies with IATA and ICAO regulations
- Durable bottles for shipping liquid reagents
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Bottles are evaluated at 15 psi (103 kPa) per 49 CFR 173.27(c)(2), ICAO Technical Instructions Part 4; 1.1.6, and IATA Dangerous Goods Regulations Section 5.0.2.9.

### Nalgene IP2 Narrow-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312099-0001	30 (1)	20	14	34	61	1000	1000
312099-0002	60 (2)	20	14	39	84	1000	1000
312099-0004	125 (4)	24	18	51	101	500	500
312099-0008	250 (8)	24	18	61	133	250	250
312099-0016	500 (16)	28	21	73	171	125	125
312099-0032	1000 (32)	38-430	27	91	216	50	50

## ► Thermo Scientific Nalgene IP2 Wide-Mouth Bottles with Closures

high-density polyethylene with polypropylene closure, bulk pack



**Nalgene™ HDPE Wide-Mouth IP2 Bottles are leakproof, constructed of durable high-density polyethylene and meet ICAO and IATA requirements.**

Safe, economical bottles for those designing, assembling and certifying combination packaging.

### details

- HDPE bottles with PP Closures, bulk
- Wide-mouth
- Complies with IATA and ICAO regulations
- For combination packaging
- Leakproof†

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Bottles are evaluated at 15 psi (103 kPa) per 49 CFR 173.27(c)(2), ICAO Technical Instructions Part 4; 1.1.6, and IATA Dangerous Goods Regulations Section 5.0.2.9.

### Nalgene IP2 Wide-Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
312199-0004	125 (4)	38	28	50	99	500	500
312199-0008	250 (8)	43	33	61	131	250	250
312199-0016	500 (16)	53	44	73	168	125	125
312199-0032	1000 (32)	63	53	91	199	50	50



## ► Thermo Scientific Nalgene Low-Particulate Narrow Mouth Bottles with Closures

high-density polyethylene with polypropylene closures



**Nalgene™ HDPE Low-Particulate Bottles are manufactured and packaged in a controlled environment, making them an excellent choice for storing high-purity chemicals**

Narrow-mouth bottles with certified low-particulate levels are ideal packaging/shipping containers for high-purity chemical reagents as well as biotech/pharmaceutical applications.

### details

- Suitable for use in compliance with the regulations for customers who are designing, assembling and certifying their own combination packaging
- Controlled environment manufacturing minimizes particulate contamination
- HDPE bottle with PP closure assembled
- Leakproof†

**Ordering Information:** Bottles are packaged with closures assembled.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Bottles are evaluated at 15 psi (103 kPa) per 49 CFR 173.27(c)(2), ICAO Technical Instructions Part 4; 1.1.6, and IATA Dangerous Goods Regulations Section 5.0.2.9.7. Bottles average less than 30 particles per mL at 0.3 microns or larger.

### Nalgene Low-Particulate Narrow Mouth Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
382099-0125	125 (4)	24	18	51	101	12	72
382099-0250	250 (8)	24	18	61	133	12	72
382099-0500	500 (16)	28	21	73	171	12	48
382099-1000	1000 (32)	38-430	27	91	216	6	24



## ► Thermo Scientific Nalgene Heavy-Duty Bottles with Closures

high-density polyethylene with white polypropylene closure



**Nalgene™ HDPE large, thick-walled bottles with wide mouths are specifically designed for use as extra-rugged storage or shipping containers for liquids or dry reagents.**

Durable HDPE bottles are used as reservoirs and waste traps in automated instrumentation.

### details

- Unique, heavy-duty construction
- Available in capacities of 1-, 2- and 4-L sizes
- White polypropylene linerless closures
- Leakproof†

**Ordering Information:** Bottles are packaged with closures assembled. Can be used with fill/vent closure system (Cat. No. 2162) sold separately.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Heavy-Duty Vacuum Bottles

Cat. No.	Capacity, L	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
2125-1000	1 (32)	53B	39	93	226	6	24
2125-2000	2 (64)	53B	39	119	260	2	12
2125-4000	4 (128)	83B	65	155	338	1	6

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## ► Thermo Scientific Nalgene Heavy-Duty Vacuum Bottles with Closures

polypropylene copolymer with polypropylene closure and thermoplastic elastomer gasket



**Nalgene™ PPCO Heavy-Duty Polypropylene Vacuum Bottles are ideal for heavy-duty biotechnology lab use.**

Large, thick-walled bottles with wide mouths, specially designed for extra-rugged service; will hold full vacuum for 24 hours.

### details

- Use as a waste aspirator bottle or as autoclavable vessel for scale-up activities in cell culture applications
- Can withstand repeated room-temperature vacuum applications
- Rugged 53B and 83B Closures of white polypropylene with TPE gaskets
- Autoclavable
- Leakproof†

**Ordering Information:** Bottles are packaged with closures assembled. Can be used with fill/vent closure system (Cat. No. 2162) sold separately.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Heavy-Duty Vacuum Bottles

Cat. No.	Capacity, L	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
DS2126-0250	250 (8)	53B	34	73	133	1	6
2126-1000	1L	53B	39	93	226	6	24
2126-2000	2L	53B	39	119	260	2	12
2126-4000	4L	83B	65	155	338	1	6
2126-5000	5L	83B	64	156	414	1	4



## ► Thermo Scientific Nalgene Square Media Bottles

polyethylene terephthalate copolyester, with high-density polyethylene closures, in shrink-wrapped trays, non-sterile



**Nalgene™ PETG Square Media Bottles with closures are specifically designed for packaging and shipping liquid medias, buffers and sera.**

Heavy-walled, durable bottles offer excellent gas barrier properties for storing media and sera.

### details

- Heavy-walled and durable
- Shatter-resistant
- Provide excellent gas barrier properties
- In shrink-wrap trays
- Molded-in graduations
- Clear bottles for easy identification of bottles
- Non-sterile
- Bottle and closure material are ADCF (Animal Derived Component Free)
- Leakproof†

**Ordering Information:** Bottles and closures are packed in shrink-wrapped trays in double-polybagged cartons.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and Closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI.

### Nalgene Square Media Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
322020-0030	30 (1)	20	14	38 Square	64	40	280
322020-0060	60 (2)	24	18	41 Square	82	40	200
322020-0125	125 (4)	38-430	28	54 Square	110	24	96
322020-0250	250 (8)	38-430	28	61 Square	146	30	60
322020-0500	500 (16)	38-430	28	74 Square	177	20	40
322020-1000	1000 (32)	38-430	28	94 Square	220	24	48
322020-2000	2000 (64)	53B	39	116 Square	271	6	12



## ► Thermo Scientific Nalgene Square Media Bottles

polyethylene terephthalate copolyester with high-density polyethylene closures,  
in shrink-wrapped trays, sterile



### Nalgene™ Square Media Bottles are molded of crystal clear PETG.

Ideal for prolonged storage of pH sensitive liquids such as culture media. Certified sterile and non-pyrogenic to eliminate costly washing, depyrogenation and sera autoclaving steps. PETG material promotes reduced permeability to CO<sub>2</sub>/O<sub>2</sub> – perfect for media storage.

#### details

- Supported by extensive validation documentation
- Made from durable, break-resistant polyethylene terephthalate copolyester (PETG)
- Bottle and closure material are ADCF (Animal Derived Component-Free)
- Radiation-sterilized and non-pyrogenic to eliminate costly washing, depyrogenation and autoclaving steps
- Molded-in graduations

**Recommended for:** Storage and shipping of liquid media, buffers and sera.

**Ordering Information:** Packed in shrink-wrapped trays in double-polybagged cartons.

**Compliance:** Bottles and closures are certified radiation sterilized (SAL 10<sup>-6</sup>), non-pyrogenic and non-cytotoxic, and comply with USP Class VI guidelines.

*Note: 2 L size has molded-in handgrips.*

#### Nalgene Square Media Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342020-0030	30 (1)	20	14	38 Square	64	40	280
342020-0060	60 (2)	24	18	41 Square	82	40	200
342020-0125	125 (4)	38-430	28	54 Square	110	24	96
342020-0250	250 (8)	38-430	28	61 Square	146	30	60
342020-0500	500 (16)	38-430	28	74 Square	177	20	40
342020-1000	1000 (32)	38-430	28	94 Square	220	12	24
342020-2000	2000 (64)	53B	39	116 Square	271	6	12
342020-9500	500 (16)	38-430	28	75 Square	178	24	48

## ► Thermo Scientific Nalgene Square Media Bottles

polyethylene terephthalate copolyester without closure, in shrink-wrapped trays, sterile



**Nalgene™ PETG Square Media Bottles without closures are specifically designed for packaging and shipping liquid medias, buffers and sera.**

Heavy-walled, durable bottles without closures are designed for use in filling lines; closures sold separately.

### details

- Heavy-walled and durable
- Shatter-resistant
- Excellent gas barrier properties
- Sterile  $10^{-6}$  SAL
- Molded-in graduations
- Bottles are packed without closures – order separately (Cat. No. 342151-0384)
- Bottle material is ADCF (Animal Derived Component-Free)
- Leakproof† when used with Nalgene HDPE Closures

**Recommended for:** Storage and shipping of liquid media, buffers and sera.

**Ordering Information:** Packed in shrink-wrapped trays in double poly-bagged cartons.

**Compliance:** Bottles and closures are certified radiation sterilized (SAL  $10^{-6}$ ), non-pyrogenic and non-cytotoxic, and comply with USP Class VI guidelines.

### Nalgene Square Media Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342024-0030	30 (1)	20	14	38 square	64	40	280
342024-0060	60 (2)	24	18	41 square	82	40	200
342024-0125	125 (4)	38-430	28	53 square	110	24	96
342024-0250	250 (8)	38-430	28	59 square	146	30	60
342024-0500	500 (16)	38-430	28	74 square	177	20	40
342024-1000	1000 (32)	38-430	28	92 square	220	12	24
342024-9500	500 (16)	38-430	28	75 square	178	24	48



## ► Thermo Scientific Nalgene Square Media Bottles

polyethylene terephthalate copolyester, with septum closure, in shrink-wrapped trays, sterile



**Nalgene™ Square Media Bottles with septum closure are made of durable, break-resistant PETG.**

Standard Nalgene PETG bottles feature septum closure for aseptic syringe dispensing or addition of supplements. HDPE closure with silicone/PTFE septum provides a PTFE fluid contact surface that is inert and nonstick to ensure fluid integrity.

### details

- Leakproof†, transparent media bottles
- Square design saves valuable shelf space
- Bottles and closures are sterile to 10<sup>-6</sup> SAL

**Recommended for:** Ideal for packaging of biological and diagnostic reagents that require aseptic dispensing or addition of supplements by syringe.

**Ordering Information:** Packed in shrink-wrapped trays in double-polybagged cartons.

**Compliance:** Meet USP Class IV standards. Non-cytotoxic.

### Nalgene Square Media Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342023-0060	60 (2)	24	18	41 Square	82	40	200
342023-0125	125 (4)	38-430	28	54 Square	110	24	96
342023-0500	500 (16)	38-430	28	74 Square	177	20	40
342023-1000	1000 (32)	38-430	28	94 Square	220	12	24
342023-9500	500 (16)	38-430	28	75 Square	178	24	48



## ► Thermo Scientific Nalgene Square Media Bottles

translucent amber polyethylene terephthalate copolyester, with amber high-density polyethylene closure, in shrink-wrapped trays, non-sterile



**Nalgene™ Translucent Amber PETG Square Media Bottles are featured with opaque amber HDPE closure.**

Translucent amber bottles are ideal for light-sensitive media, buffers and sera.

### details

- Heavy-walled, shatter resistant and durable
- Space-saving square design
- Molded-in graduations
- Non-sterile, non-pyrogenic, non-cytotoxic
- Leakproof†, with drip-proof neck finish and molded-in neck ring
- PETG provides excellent gas barrier, with transparency and reduced permeability to CO<sub>2</sub> and O<sub>2</sub>
- Amber bottle and closure provide protection for light-sensitive reagents

**Recommended for:** For storage and shipping of light-sensitive liquid media, buffers and sera.

**Ordering Information:** Packed in shrink-wrapped trays in double-polybagged cartons.

**Compliance:** PETG Media Bottles and HDPE closure materials meet current biological testing standards including USP Class VI, USP 661, and European Pharmacopeia for Abnormal Toxicity.

### Nalgene Square Media Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
322021-0030	30 (1)	20	14	38 Square	64	40	280
322021-0060	60 (2)	24	18	41 Square	82	40	200
322021-0125	125 (4)	38-430	28	54 Square	110	24	96



## ► Thermo Scientific Nalgene Square Media Bottles

polyethylene terephthalate with high-density polyethylene closures, in shrink-wrapped trays, sterile



**Nalgene™ PET Square Media Bottles with closures are sterile and lightweight.**

Lightweight bottles are shatter-resistant and provide excellent gas barrier properties for storage and shipping of liquid media, buffers, and sera.

### details

- PET with natural HDPE closure
- Space-saving square design
- Molded-in graduations and neck ring for use with tamper evident shrink sleeves
- Sterile, non-pyrogenic, non-cytotoxic
- Excellent gas barrier, with transparency and reduced permeability to CO<sub>2</sub> and O<sub>2</sub>
- Bottle and closure material are ADCF (Animal Derived Component-Free)
- Leakproof†

**Recommended for:** Storage and shipping of liquid media, buffers and sera.

**Ordering Information:** Products are packaged in shrink-wrap trays. Trays are double polybagged inside the master carton.

**Compliance:** PET Media Bottles and HDPE closure materials meet current biological testing standards including USP Class VI, USP <661>, European Pharmacopeia for Abnormal Toxicity.

### Nalgene Square Media Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342040-0125	125 (4)	38-430	28	52 Square	104	24	96
342040-0250	250 (8)	38-430	28	59 Square	140	30	60
342040-0650	650 (16)	38-430	28	76 Square	173	24	48
342040-1000	1000 (32)	38-430	28	92 Square	213	12	24



## ► Thermo Scientific Nalgene Square Media Bottles

polyethylene terephthalate, without closure in shrink-wrapped trays, sterile



**Nalgene™ PET square media bottles without closures are sterile, lightweight and shatter-resistant.**

Lightweight bottles without closures are designed for use in filling lines; closures sold separately.

### details

- Sterile bottles with molded-in graduations and neck-ring
- Non-cytotoxic, non-hemolytic and non-pyrogenic
- Excellent gas barrier properties
- Gamma irradiated to SAL10<sup>-6</sup>
- Bottle material is ADCF (Animal Derived Component-Free)
- Bottles are packed without closures - order separately (Cat. No. 342151-0384)
- Leakproof† when used with Nalgene HDPE Closures

**Ordering Information:** Bottles and closures are packed in separate polybags within the same carton.

**Compliance:** Meet current biological testing standards including USP Class VI, USP <661>, European Pharmacopeia for Abnormal Toxicity (modified).

### Nalgene PET Square Media Bottles

Cat. No.	Capacity, mL (oz.)	Closure Size, mm	Neck I.D., mm	O.D., mm	Height with Closure, mm	No. per Tray	No. per Case
342044-0125	125 (4)	38-430	28	52 Square	104	24	96
342044-0650	650 (16)	38-430	28	76 Square	173	24	48
342044-1000	1000 (32)	38-430	28	92 Square	213	12	24



## ► Thermo Scientific Nalgene Sterile Closure for Media Bottles

high-density polyethylene closure for polyethylene terephthalate/polyethylene terephthalate copolyester, media bottles, sterile



**Nalgene™ HDPE closures are specially designed for use with PET/PETG square media bottles.**

Reliable Nalgene closures fit only Nalgene bottles and provide a leakproof seal.

### details

- Available in 20-415 finish, 24-415 finish and 38-430 finish
- Natural HDPE closures are ADCF (Animal Derived Component-Free)
- Fits Nalgene PET and PET Media Bottles sold separately without closures

**Ordering Information:** Closures are bulk packed.  
Order Nalgene PET or PETG bottles without closures separately.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements.

### Nalgene Closure for Media Bottles

Cat. No.	Neck I.D., mm	No. per Case
342151-0200	20-415	280
342151-0240	24-415	200
342151-0384	38-430	240



## ► Thermo Scientific Nalgene Sterile Closures for Media Bottles

high-density polyethylene closure w/silicone/PTFE septum for polyethylene terephthalate/polyethylene terephthalate copolyester media bottles, sterile



**Nalgene™ HDPE Closures with silicone/PTFE septum combine elastomeric sealing of silicone with non-reactive PTFE reagent contact surface.**

### details

- For use with Nalgene Sterile PET & PETG media bottles
- Sterile 10<sup>-6</sup> SAL
- No adhesives used to attach septum to HDPE closure
- Non-cytotoxic, non-pyrogenic
- Dual septum material provides improved gas barrier

**Ordering Information:** Closures are bulk-packed. Order Nalgene PET or PETG bottles without closures separately.

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements.

### Nalgene Closure for Media Bottles

Cat. No.	Neck Finish, mm	No. per Case
342178-0240	24-415	200
342178-0384	38-430	240



## ► Thermo Scientific Nalgene Colored Closures

polypropylene, bulk pack



**Nalgene™ PP 13-415 Colored Closures are one-piece and linerless with integrally-molded seal ring to ensure leakproof performance.**

The opaque closures protect contents from UV light when used with opaque bottles.

### details

- Reduce chance of cross contamination
- Opaque white, amber, green, red and blue closures protect contents from UV light when used with opaque Nalgene bottles
- One-piece, linerless, with integrally-molded seal ring
- Fit Nalgene Narrow-Mouth 4 mL Bottles
- Well-defined closure knurls makes gripping and capping easy
- Leakproof† when used with Nalgene narrow-mouth bottles

**Ordering Information:** Closures are bulk packed. Order bottles separately (Cat. Nos. 362002, 362004, 362006, 362008).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Colored closures meet the requirements for light-resistant containers per USP latest edition when used with opaque bottles.

### Nalgene Colored Closures 13-415

Cat. No.	Color	Closure, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362150-0130	Natural	13-415	16	8	2000	2000
362150-1130	White	13-415	16	8	2000	2000
362150-4130	Green	13-415	16	8	2000	2000
362150-5130	Red	13-415	16	8	2000	2000
362150-6130	Blue	13-415	16	8	2000	2000
362150-7130	Amber	13-415	16	8	2000	2000



## ► Thermo Scientific Nalgene Colored Closures

polypropylene, bulk pack



**Nalgene™ PP 20-415 Colored Closures are one-piece and linerless with integrally-molded seal ring to ensure leakproof<sup>†</sup> performance.**

The opaque closures protect contents from UV light when used with opaque bottles.

### details

- Reduce chance of cross contamination
- Opaque white, amber, green, red and blue closures protect contents from UV light when used with opaque Nalgene bottles
- One-piece, linerless, with integrally-molded seal ring
- Fit Nalgene narrow-mouth 8, 15, 30, 60 mL bottles
- Well-defined closure knurls make gripping and capping easy
- Guarantee leakproof<sup>†</sup>, when used with Nalgene narrow-mouth bottles

**Ordering Information:** Closures are bulk packed. Order bottles separately (Cat. Nos. 362002, 362004, 362006, 362008).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Colored closures meet the requirements of light-resistant containers per USP latest edition when used with opaque bottles.

### Nalgene Colored Closures 20-415

Cat. No.	Color	Closure, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362150-0200	Natural	20-415	22	12	2000	2000
362150-1200	White	20-415	22	12	2000	2000
362150-4200	Green	20-415	22	12	2000	2000
362150-5200	Red	20-415	22	12	2000	2000
362150-6200	Blue	20-415	22	12	2000	2000
362150-7200	Amber	20-415	22	12	2000	2000



## ► Thermo Scientific Nalgene Colored Closures

polypropylene, bulk pack



**Nalgene™ PP 24-415 Colored Closures are one-piece and linerless with integrally-molded seal ring to ensure leakproof<sup>†</sup> performance.**

The opaque closures protect contents from UV light when used with opaque bottles.

### details

- Reduce chance of cross contamination
- Opaque white, amber, green, red and blue closures protect contents from UV light when used with opaque Nalgene bottles
- One-piece, linerless, with integrally-molded seal ring
- Fit Nalgene narrow-mouth 125 mL and 250 mL bottles
- Well-defined closure knurls make gripping and capping easy
- Leakproof<sup>†</sup> when used with Nalgene narrow-mouth bottles

**Ordering Information:** Closures are bulk packed. Order bottles separately (Cat. Nos. 362002, 362004, 362006, 362008).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Colored closures meet the requirements for light-resistant containers per USP latest edition when used with opaque bottles.

### Nalgene Colored Closures 24-415

Cat. No.	Color	Closure, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362150-0240	Natural	24-415	27	15	1000	1000
362150-1240	White	24-415	27	15	1000	1000
362150-4240	Green	24-415	27	15	1000	1000
362150-5240	Red	24-415	27	15	1000	1000
362150-6240	Blue	24-415	27	15	1000	1000
362150-7240	Amber	24-415	27	15	1000	1000



## ► Thermo Scientific Nalgene Colored Closures

polypropylene, bulk pack



**Nalgene™ PP 28-415 Colored Closures are one-piece and linerless with integrally-molded seal ring to ensure leakproof† performance.**

The opaque closures protect contents from UV light when used with opaque bottles.

### details

- Reduce chance of cross contamination
- Opaque white, amber, green, red and blue closures protect contents from UV light when used with opaque Nalgene bottles
- One-piece, linerless, with integrally-molded seal ring
- Fit Nalgene narrow-mouth 500 mL bottles
- Well-defined closure knurls make gripping and capping easy
- Leakproof† when used with Nalgene narrow-mouth bottles

**Ordering Information:** Closures are bulk packed. Order bottles separately (Cat. Nos. 362002, 362004, 362006, 362008).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Colored closures meet the requirements for light-resistant containers per USP latest edition when used with opaque bottles.

### Nalgene Colored Closures 28-415

Cat. No.	Color	Closure, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362150-0280	Natural	28-415	30	15	500	500
362150-1280	White	28-415	30	15	500	500
362150-4280	Green	28-415	30	15	500	500
362150-5280	Red	28-415	30	15	500	500
362150-6280	Blue	28-415	30	15	500	500
362150-7280	Amber	28-415	30	15	500	500





## ► Thermo Scientific Nalgene Colored Closures

polypropylene, bulk pack



**Nalgene™ PP 38-430 Colored Closures are one-piece and linerless with integrally-molded seal ring to ensure leakproof performance.**

The opaque closures protect contents from UV light when used with opaque bottles.

### details

- Reduce chance of cross contamination
- Opaque white, amber, green, red and blue closures protect contents from UV light when used with opaque Nalgene bottles
- One-piece, linerless, with integrally-molded seal ring
- Fit Nalgene narrow-mouth 1000 mL bottles
- Well-defined closure knurls make gripping and capping easy
- Leakproof† when used with Nalgene narrow-mouth bottles

**Ordering Information:** Closures are bulk packed. Order bottles separately (Cat. Nos. 362002, 362004, 362006, 362008).

**Compliance:** Manufactured in compliance with ISO 13485:2003 quality requirements. Bottles and closures meet the requirements of 21CFR177.1520 for food and beverage use, USP Class VI. Colored closures meet the requirements for light-resistant containers per USP latest edition when used with opaque bottles.

### Nalgene Colored Closures 38-430

Cat. No.	Color	Closure, mm	O.D., mm	Height with Closure, mm	No. per Pack	No. per Case
362150-0384	Natural	38-430	41	27	250	250
362150-1384	White	38-430	41	27	250	250
362150-4384	Green	38-430	41	27	250	250
362150-5384	Red	38-430	41	27	250	250
362150-6384	Blue	38-430	41	27	250	250
362150-7384	Amber	38-430	41	27	250	250

## ► Thermo Scientific Nalgene Torque Wrench Fittings for Polypropylene Closures



**Nalgene™ Torque Wrench Fittings ensure accurate torque readings.**

Proper torquing of Nalgene closures is critical to leakproof sealing.

### details

- Epoxy
- Specifically designed for Nalgene polypropylene closures

**Ordering Information:** Order fittings that match closure resin.

**Compatible Products:** Thermo Scientific Nalgene Torque Wrenches (Cat. Nos. 2195-6169 and -6177).

### Nalgene Torque Wrench Fittings for polypropylene closures

Cat. No.	Drive Size, in.	Fits Closure Size, mm	No. per Case
2195-0010	1/4	11 (Low Profile MPV)	1
2195-0011	1/4	11 (High Profile MPV)	1
2195-0013	1/4	13-415	1
2195-0020	1/4	20-415	1
2195-0024	1/4	24-415	1
2195-0028	1/4	28-415	1
2195-0038	1/4	38-415	1
2195-0043	1/4	43-415	1
2195-0048	1/4	48-415	1
2195-0053	1/4	53-415	1
2195-0063	3/8	63-415	1
2195-0153	1/4	53B	1
2195-0183	3/8	83B	1
2195-0438	1/4	38-430	1



## ► Thermo Scientific Nalgene Torque Wrench Fittings for High-Density Polyethylene Closures



**Nalgene™ Torque Wrench Fittings ensure accurate torque readings.**

Proper torquing of Nalgene closures is critical to leakproof sealing.

### details

- Epoxy
- Specifically designed for Nalgene HDPE closures

**Ordering Information:** Order fittings that match closure resin.

**Compatible Products:** Thermo Scientific Nalgene Torque Wrenches (Cat. Nos. 2195-6169 and -6177).

### Nalgene Torque Wrench Fittings for High-Density Polyethylene Closures

Cat. No.	Drive Size, in.	Fits Closure Size, mm	No. per Case
2195-1020	1/4	20-415	1
2195-1021	1/4	20-415 (serum vial)	1
2195-1024	1/4	24-415	1
2195-1028	1/4	28-415	1
2195-1038	1/4	38-415	1
2195-1438	1/4	38-430	1
2195-1043	1/4	43-415	1
2195-1053	1/4	53-415	1
2195-1153	1/4	53B	1
2195-1183	3/8	83B	1



## ► Thermo Scientific Nalgene Torque Wrench Fittings for Tefzel™ Closures



**Nalgene™ Torque Wrench Fittings ensure accurate torque readings.**

Proper torquing of Nalgene closures is critical to leakproof sealing.

### details

- Epoxy
- Specifically designed for Nalgene tefzel closures

**Ordering Information:** Order fittings that match closure resin.

**Compatible Products:** Thermo Scientific Nalgene Torque Wrenches (Cat. Nos. 2195-6169).

### Nalgene Torque Wrench Fittings for Tefzel™ Closures

Cat. No.	Drive Size, in.	Fits Closure Size, mm	No. per Case
2195-2020	1/4	20-415	1
2195-2024	1/4	24-415	1
2195-2028	1/4	28-415	1
2195-2033	1/4	33-415	1
2195-2038	1/4	38-415	1
2195-2438	1/4	38-430	1
2195-2043	1/4	43-415	1
2195-2048	1/4	48-415	1
2195-2053	1/4	53-415	1



## ► Thermo Scientific Nalgene Torque Wrench Fittings for perfluoroalkoxy (PFA) Closures



**Nalgene™ Torque Wrench Fittings ensure accurate torque readings.**

Proper torquing of Nalgene closures is critical to leakproof sealing.

### details

- Epoxy
- Specifically designed for Nalgene perfluoroalkoxy (PFA) closures

**Ordering Information:** Order fittings that match closure resin.

**Compatible Products:** Thermo Scientific Nalgene Torque Wrenches (Cat. Nos. 2195-6169).

### Nalgene Torque Wrench Fittings for PFA Closures

Cat. No.	Drive Size, in.	Fits Closure Size, mm	No. per Case
2195-3020	1/4	20-415	1
2195-3438	1/4	38-430	1

## ► Thermo Scientific Nalgene Torque Wrench Fittings for Biotainer™ Closures



**Nalgene™ Torque Wrench Fittings ensure accurate torque readings.**

Proper torquing of Nalgene closures is critical to leakproof sealing.

### details

- Epoxy
- Specifically designed for Nalgene Biotainer closures

**Ordering Information:** Order fittings that match closure resin.

**Compatible Products:** Thermo Scientific Nalgene Torque Wrenches (Cat. Nos. 2195-6169).

### Nalgene Torque Wrench Fittings for Biotainer Closures

Cat. No.	Drive Size, in.	Fits Closure Size, mm	No. per Case
2595-3038	1/4	38	1
2595-9048	1/4	48	1



## ► Thermo Scientific Nalgene Torque Wrenches



### **Nalgene™ Torque Wrenches ensure accurate torque readings.**

Proper torquing of Nalgene closures is critical to leakproof sealing.

These wrenches can be used to confirm capping machine settings, on-line inspection and to check torques. Must be used with Nalgene torque wrench fittings.

**Ordering Information:** Order fittings that match closure resin.

**Compatible Products:** Thermo Scientific Nalgene Torque Wrench Fittings (Cat. No. 2195).

### **Nalgene Torque Wrenches**

Cat. No.	Drive Size, in.	Torque Range, lbs.	No. per Case
2195-6169	1/4	0 to 75	1
2195-6177	3/8	0 to 250	1



## sample storage | 562-607

Everything you need to protect and track your samples.

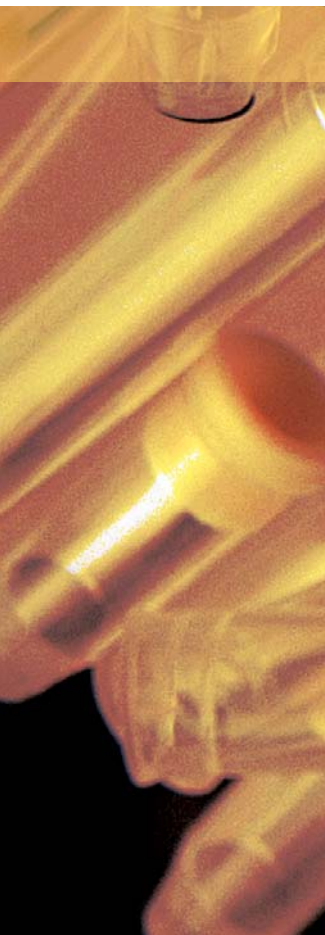
Whether you're storing just a few cryogenic samples or thousands of 2D barcoded specimens in a biobank, we have a Thermo Scientific tube for you – plus all the accessories and equipment you need to ensure efficient sample preservation, tracking and identification.

**Thermo Scientific Nalgene and Nunc cryogenic tubes** are ideally suited for research storage of high-value materials, tissue and blood specimens, and general purpose cryopreservation. Nalgene™ tubes are certified RNase- and DNase-free and sterile to SAL 10<sup>-6</sup>, are non-cytotoxic and non-pyrogenic, and carry CE marking. The Nunc™ cryogenic line features both internal- and external-thread tubes.

For the next level of storage and tracking, look to **Thermo Scientific 2D barcoded tubes**. Nunc Cryobank™ tubes have a high-contrast, permanent 2D barcode etched into the bottom of each. Packaged in an ANSI microplate footprint rack, Cryobank tubes are compatible with decapping and capping equipment and are available in volumes up to 5.0 mL.

**Thermo Scientific Matrix 2D barcoded tubes** feature permanent, etched 2D codes and unique rack design, ideal for automation and sample tracking. Matrix 2D coded tubes are perfect for small or large-scale sample storage and are available in volumes from 0.5 to 12 mL. To meet laboratory throughput needs, Thermo Scientific VisionMate 2D barcode readers complement our line of storage tubes. Rely on our 8-channel Capper/Decapper for speedy tube handling, or our Thermo Scientific Capit-All automated capper for higher throughput full-rack capping and decapping.

► For additional information on our sample storage products, visit:  
[www.thermoscientific.com/samplestorage](http://www.thermoscientific.com/samplestorage)







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with  
confidence



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## ► Thermo Scientific Nalgene General Long-term Storage Cryogenic Tubes



**Nalgene™ Cryogenic Tubes** are externally-threaded storage tubes ideally suited for research and general laboratory storage of high-value and genomic materials down to vapor phase liquid nitrogen temperatures.

### details

- Large writing areas accommodate more written sample information and graduations for easy visual volume assessment
- Non-cytotoxic raw materials for added sample security and tubes certified free of DNase and RNase for genomic applications
- External threading enhances aseptic technique
- Certified SAL to  $10^{-6}$  for the highest sterility assurance available
- Suitable for storage from general cold storage refrigeration (+4°C) down to the vapor phase of liquid nitrogen
- System 100 Tubes offer a more dense storage option (10 x 10) to save precious storage space
- Self-standing tubes for ease of use on the benchtop
- Blank, non-sterile and uncapped tubes available in bulk for less demanding applications

**Certifications:** CE Marked for storage of diagnostic samples in the EU.

*Notes: Do not store in the liquid phase of nitrogen without CryoFlex tubing.*

**Nalgene General Long-term Storage Cryogenic Tubes**

Cat. No.	Size, mL	Dimensions, H x O.D., mm (in.)	Thread Style	Closure Material	Bottom Style	Anti-Rotation Base	Self-Standing	Writing Area and Graduations	Sterile	Vapor LN <sup>2</sup> (to -150°C)	DNase/RNase Free	No. per Pack	No. per Case
5000-1012	1	38 x 12 (1.496 x 0.472)	External	PP	Conical	Yes	Yes	Yes	Yes	Yes	Yes	25	500
5000-0012	1.2	38.1 x 13.5 (1.5 x 0.531)	External	PE	Conical	Yes	Yes	Yes	Yes	Yes	Yes	25	500
5012-0012	1.2	38.1 x 13.5 (1.5 x 0.531)	External	PE	Conical	Yes	Yes	No	Yes	Yes	Yes		1000
5011-0012	1.2	38.1 x 13.5 (1.5 x 0.531)	External	PE	Conical	Yes	Yes	No	Yes	Yes	No		1000
5000-1020	1.5	48 x 12 (1.89 x 0.472)	External	PP	Conical	Yes	Yes	Yes	Yes	Yes	Yes	25	500
5000-0020	2	48.3 x 13.5 (1.902 x 0.531)	External	PE	Conical	Yes	Yes	Yes	Yes	Yes	Yes	25	500
5012-0020	2	48.3 x 13.5 (1.902 x 0.531)	External	PE	Conical	Yes	Yes	No	Yes	Yes	Yes		1000
5011-0020	2	48.3x13.5 (1.902 x 0.531)	External	PE	Conical	Yes	Yes	No	Yes	Yes	No		1000
5000-0050	5	92 x 13.5 (3.622 x 0.531)	External	PE	Conical	Yes	Yes	Yes	Yes	Yes	Yes	10	250
5005-0015	15	33 x 47 (1.299 x 1.850)	External	PE	Flat	No	Yes	No	Yes	No	No	5	75



## ► Thermo Scientific Nalgene General Long-term Storage Cryogenic Tube Accessories



Color coders



Benchtop cryogenic tube holder

Nalgene™ Cryogenic Tube Accessories are specifically designed to enhance use of the Nalgene Cryogenic Tube products, including color coders for individual tube identification and benchtop tube holders for single-handed capping and decapping.

### details

- Polystyrene coders snap into the caps of Nalgene Cryogenic Tubes for easy sample identification
- Polycarbonate Benchtop Cryogenic Tube Holder has anti-rotation feature for one-handed capping and decapping

### Nalgene General Long-term Storage Cryogenic Tube Accessories

Cat. No.	Description	Color	Array	Anti-Rotation	No. per Pack	No. per Case
5045-0000	Color coder	White	n/a	n/a	100	500
5045-0002	Color coder	Yellow	n/a	n/a	100	500
5045-0003	Color coder	Blue	n/a	n/a	100	500
5045-0004	Color coder	Green	n/a	n/a	100	500
5045-0005	Color coder	Red	n/a	n/a	100	500
5030-0510	Benchtop Cryogenic Tube Holder	White	5 x 10	Yes	1	4
5030-0505	Benchtop Cryogenic Tube Holder	Blue	5 x 5	Yes	1	4



## ► Thermo Scientific Nunc Biobanking and Cell Culture



**Nunc™ Cryotubes and accessories are designed to work together and provide the best solutions for the most trusted sample storage applications, such as highly-regulated applications, irreplaceable high-value content storage and tissue, cell, blood or other materials for biobanking.**

### details

- Non-cytotoxic, non-mutagenic raw materials and pyrogen-free IVD compatible tubes for added sample security
- External or internally threaded options available
- Tubes certified DNase- and RNase-free for genomic applications
- Certified SAL to  $10^{-6}$  for the highest sterility assurance available
- Suitable for storage from general cold storage refrigeration (+4°C) down to the vapor phase of liquid nitrogen
- Bulk, uncapped, non-sterile versions available for less demanding applications
- Self-standing, anti-rotation and round bottom options available to meet any requirement

**Compliance:** CE Marked for storage of diagnostic samples in the EU. Compliant with IATA for shipping.

*Notes: Do not store in the liquid phase of nitrogen without CryoFlex tubing.*

### Nunc Biobanking and Cell Culture Cryogenic Tubes

Cat. No.	Size, mL	Dimensions, H x O.D., mm (in.)	Thread Style	Closure Material	Bottom Style	Anti-Rotation Base	Self-Standing	Writing Area and Graduations	Sterile	Vapor LN <sup>2</sup> (to -150°C)	DNase/RNase Free	No. per Pack	No. per Carton	No. per Case
374080	0.5	35 x 8.8 (1.378 x 0.346)	Internal	PP	Conical	Yes	Yes	No	Yes	Yes	Yes	169		845
374081	1	48.5 x 8.8 (1.909 x 0.346)	Internal	PP	Conical	Yes	Yes	No	Yes	Yes	Yes	169		845
375353	1	41 x 12.5 (1.614 x 0.492)	External	PE	Conical	Yes	Yes	Yes	Yes	Yes	Yes	50	500	2000
375299	1	30 x 12.4 (1.181 x 0.492)	External	PE	Round	No	No	Yes	Yes	No	Yes	50	500	2000
347597	1	41 x 12.4 (1.614 x 0.488)	External	PE	Conical	Yes	Yes	No	Yes	Yes	Yes	50	500	2000
377224	1	42 x 12.5 (1.654 x 0.492)	Internal	PP	Conical	Yes	Yes	Yes	Yes	Yes	Yes	50	500	2000
366656	1	42 x 12.5 (1.654 x 0.492)	Internal	PP	Conical	Yes	Yes	Yes	Yes	Yes	Yes	50	500	2000
375418	1.8	48 x 12.5 (1.890 x 0.492)	External	PE	Round	Yes	Yes	Yes	Yes	Yes	Yes	50	450	1800
340711	1.8	44 x 12.4 (1.732 x 0.488)	External	PE	Round	No	No	Yes	Yes	No	Yes	50	500	2000
347627	1.8	48 x 12.5 (1.890 x 0.492)	External	PE	Round	Yes	Yes	No	Yes	Yes	Yes	50	450	1800
377267	1.8	49 x 12.5 (1.929 x 0.492)	Internal	PP	Round	Yes	Yes	Yes	Yes	Yes	Yes	50	450	1800
368632	1.8	49 x 12.5 (1.929 x 0.492)	Internal	PP	Round	Yes	Yes	Yes	Yes	Yes	Yes	50	450	1800



## ► Thermo Scientific Nunc Biobanking and Cell Culture Cryogenic Tubes

continued

Nunc Biobanking and Cell Culture Cryogenic Tubes

Cat. No.	Size, mL	Dimensions, H x O.D., mm (in.)	Thread Style	Closure Material	Bottom Style	Anti-Rotation Base	Self-Standing	Writing Area and Graduations	Sterile	Vapor LN <sup>2</sup> (to -150°C)	DNase/RNase Free	No. per Pack	No. per Carton	No. per Case
363401	1.8	48 x 12.5 (1.890 x 0.492)	Internal	PP	Round	No	No	Yes	Yes	Yes	Yes	50	500	2000
351934	1.8	48 x 1 2.5 (1.890 x 0.492)	Internal, NC	n/a	Round	No	No	Yes	No	Yes	Yes	250		2500
379189	3.6	72 x 12.5 (2.835 x 0.492)	Internal	PP	Round	Yes	Yes	Yes	Yes	Yes	Yes	50	400	1600
366524	3.6	70 x 12.5 (2.756 x 0.492)	Internal	PP	Round	No	No	Yes	Yes	Yes	Yes	50	400	1600
367997	3.6	70 x 12.5 (2.756 x 0.492)	Internal, NC	n/a	Round	No	No	Yes	No	Yes	Yes	250		1500
337516	4.5	91 x 12.5 (3.583 x 0.492)	External	PE	Round	Yes	Yes	Yes	Yes	Yes	Yes	50	300	1200
347643	4.5	91 x 12.5 (3.583 x 0.492)	External	PE	Round	Yes	Yes	No	Yes	Yes	Yes	50	300	1200
379146	4.5	92 x 12.5 (3.622 x 0.492)	Internal	PP	Round	Yes	Yes	Yes	Yes	Yes	Yes	50	300	1200
363452	4.5	92 x 12.5 (3.622 x 0.492)	Internal	PP	Round	No	No	Yes	Yes	Yes	Yes	50	300	1200



## ► Thermo Scientific Nunc Biobanking and Cell Culture Cryogenic Tube Accessories



Color coders

**Nunc™ Cryotube Accessories line includes items to make the tubes easier to use and more flexible for your laboratory needs.**

### details

- Polycarbonate Color Coders snap into caps of Nunc Cryotubes for easy identification of samples
- Color coders compatible with Nunc Cryobank 2.0 and 5.0 mL caps
- Polyphenylene oxide benchtop tube holders are autoclavable for ease of sterilization and include anti-rotation features for one-handed capping and decapping

### Nunc Biobanking and Cell Culture Cryogenic Tube Accessories

Cat. No.	Description	Color	Array	Anti-Rotation	No. per Pack	No. per Case
375930	Color Coder	Assorted	n/a	n/a	500	2000
354755	Color Coder	White	n/a	n/a	500	2000
354879	Color Coder	Blue	n/a	n/a	500	2000
354968	Color Coder	Red	n/a	n/a	500	2000
355018	Color Coder	Green	n/a	n/a	500	2000
355077	Color Coder	Yellow	n/a	n/a	500	2000
355158	Color Coder	Orange	n/a	n/a	500	2000
375868	Color Coder	Brown	n/a	n/a	500	2000
375884	Color Coder	Pink	n/a	n/a	500	2000
375906	Color Coder	Gray	n/a	n/a	500	2000
375922	Color Coder	Purple	n/a	n/a	500	2000
376589	Benchtop Cryogenic Tube Holder	Blue	4 x 10	Yes	1	15



Benchtop cryogenic tube holder



## ► Thermo Scientific Nunc General Long-term Storage Tubes



**Nunc™ Stor-It™ tubes are an economical choice for samples.**

Starfoot vial fits into grooves of the CryoTube Rack (Cat. No. 376589), which allows one-hand operation.

### details

- Caps and tubes packaged separately to save handling time
- Tubes are non-sterile
- Economical choice for less demanding applications

### Nunc General Long-term Storage Tubes

Cat. No.	Size, mL	Dimensions, H x O.D., mm (in.)	Thread Style	Closure Material	Bottom Style	Anti-Rotation	Self-Standing	Writing Area and Graduations	Sterile	Vapor LN <sup>2</sup> (to -150°C)	DNase/RNase Free	No. per Pack	No. per Carton	No. per Case
347651	1	41 x 12.5 (1.614 x 0.492)	External	PE	Conical	Yes	Yes	Yes	No	Yes	No	50	500	2000
347910	1	41 x 12.5 (1.614 x 0.492)	External	PE	Conical	Yes	Yes	No	No	Yes	No	50	500	2000
347783	1.8	48 x 12.5 (1.890 x 0.492)	External	PE	Round	Yes	Yes	Yes	No	Yes	No	50	450	1800
347791	4.5	91 x 12.5 (3.583 x 0.492)	External	PE	Round	Yes	Yes	Yes	No	Yes	No	50	300	1200





## ► Thermo Scientific Linear Barcoded Tubes



Nalgene barcoded tubes



Nunc barcoded tubes

**Nunc™ and Nalgene™ Cryotubes with directly-printed barcodes are more robust than labels and ideal for easy sample inventory.**

Choose from available non-custom options below or call for customized options in a wide range of choices of code type, length and format.

### details

- Black barcode directly printed onto white background for high contrast and readability even in high-frost conditions
- Human readable code below the barcode for easy visual identification without a barcode reader
- Barcodes resistant to IPA, DMSO, 5% bleach, 10% acetic acid and 10% NaOH
- Non-cytotoxic raw materials for added sample security and tubes certified free of DNase and RNase for genomic applications
- External or internally threading options available
- Certified SAL to 10<sup>-6</sup> for the highest sterility assurance available
- Suitable for storage from general cold storage refrigeration (+4°C) down to the vapor phase of liquid nitrogen

**Compliance:** CE Marked for storage of diagnostic samples in the EU. Nunc tubes compliant with IATA for shipping.

*Notes: Do not store in the liquid phase of nitrogen without CryoFlex tubing.*

### Linear Barcoded Tubes

Cat. No.	Size, mL	Dimensions, H x O.D., mm (in.)	Thread Style	Closure Material	Bottom Style	Anti-Rotation	Self-Standing	Writing Area and Graduations	Sterile	Vapor LN <sup>2</sup> (to -150°C)	DNase/RNase Free	No. per Pack	No. per Carton	No. per Case
5001-0012	1.2	38.1 x 13.5 (1.5 x 0.531)	External	PE	Conical	Yes	Yes	No	Yes	Yes	Yes	20		500
5001-0050	2	92 x 13.5 (3.622 x 0.531)	External	PE	Conical	Yes	Yes	No	Yes	Yes	Yes	25		250
5001-1020	5	48 x 12 (1.890 x 0.472)	External	PP	Conical	Yes	Yes	No	Yes	Yes	Yes	20		500
5001-0020	1.5	48.3 x 13.5 (1.902 x 0.531)	External	PE	Conical	Yes	Yes	No	Yes	Yes	Yes	20		500
373530	1.8	48 x 12.5 (1.890 x 0.492)	Internal	PP	Round	Yes	Yes	No	No	Yes	Yes	50	450	1800
373530	1.8	48 x 12.5 (1.890 x 0.492)	Internal	PP	Round	Yes	Yes	No	Yes	Yes	Yes	50	450	1800



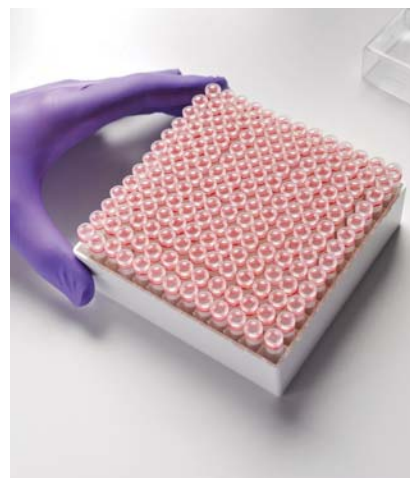
## ► Thermo Scientific Dense Storage Options



*Dense low temperature storage*



*Fits in racks you already own*



*169 tubes fit in the same footprint currently storing 81 or 100 tubes*

**The Dense Low Temperature Storage format uses standard CryoBox sizes that work with the freezer racks you currently own.**

By using standard boxes with 13 x 13 tube separators, up to 169- 1 mL tubes fit in a standard size CryoBox – effectively doubling your capacity and cutting storage costs by 50%.

### details

- Available in economical cardboard or long-lasting plastic cryobox options
- Fits up to 169- 1 mL Cryobank tubes for the most dense storage available
- See Cryobank product section for details about the tubes that fit in these cryoboxes

### Dense Storage Options

Cat. No.	Description	Capacity, No. of Tubes	Dimensions L x H x W, mm (in.)	No. per Pack	No. per Case
5050-0169	CryoBox, PC, white with clear lid	169	133 x 133 x 52 (5-1/4 x 5-1/4 x 2)	4	24
369640	Storage Box, cardboard, white	169	132 x 132 x 51 (5-1/5 x 5-1/5 x 2)	4	24
5050-0001	CryoBox, undivided, PC, white with clear lid	n/a	133 x 133 x 52 (5-1/4 x 5-1/4 x 2)	4	24
374001	Storage Box replacement divider	169	n/a	4	24
369678	Picker Pen for CryoBank Cap	n/a	n/a	1	24



► Thermo Scientific Nalgene and Nunc Labels and Pens



Nalgene pens

Nalgene™ and Nunc™ Labels and Markers are designed for permanent identification of samples and storage boxes.

details

- Cloth labels accept markers or ballpoint pen and are specifically designed for use at ultra-low temperatures, adhering to plastic and cardboard without shrinking or peeling
- Nunc and Nalgene cryoware markers come in a variety of colors for permanent handwritten identification of samples
- Use these markers by hand, or for higher throughput use them in the ID Scribe



Nunc pens

Labels and Pens

Cat. No.	Dimensions, H x W, mm (in.)	Colors	No. per Pack	No. per Case
5040-0002	25 x 50 (1 x 2 )	white	200	2000
6313-0010	n/a	1 each – red, blue, green, black	4	24
339993	n/a	1 each – red, blue, green, black	4	24
343850	n/a	black	1	10



## ► Thermo Scientific Storage Tube Protection



*Nunc CryoFlex tubing*

Protect your cryogenic tubes with Nunc™ Cryoflex tubing or Cryosleeves and our Nunc™ Mini-boxes for shipping or handling.

### details

- Heat shrink/pinch each end of the Nunc Cryoflex tubing around cryostorage tubes to prevent leakage of liquid nitrogen into the tubes during storage
- Transparent Nunc Cryosleeve tubing fits any Nunc or Nalgene tube and provides extra security during handling and submersion of tubes into the liquid phase without the tubes touching the liquid nitrogen
- Nunc Mini-boxes are ideal for storing small quantities of samples for shipping
- Friction-fit lid and durable high-impact polystyrene construction to protect samples
- Cryoflex tubing is compatible with Nalgene and Nunc cryo tubes and all Thermo Scientific 2D coded tubes

### Storage Tube Protection

No.	Description	Dimensions L x H x W /I.D., mm (in.)	Capacity, No. of Tubes	No. per Pack	No. per Case
958	CryoFlex Tube Wrap	500 x n/a x 14 (19.685 x n/a x 0.551)	Varies	15	30
6-0001	CryoSleeve Tubing	100 x n/a x 14 (3.937 x n/a x 0.551)	Varies	12	48
479	CryoTube Mini Box	69.7 x 55.7 x 17.2 (2.744 x 2.193 x 0.677)	5		350
592	CryoTube Mini Box	69.3 x 54.4 x 29.1 (2.728 x 2.142 x 1.456)	10		250



*Nunc Cryotube sealed in CryoFlex tubing*



*Nunc Cryotube Mini-boxes*

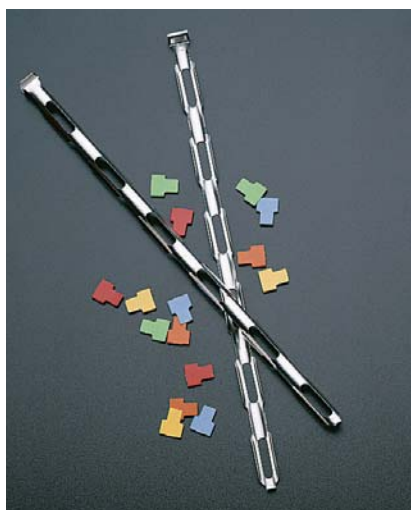


*Nalgene CryoSleeve tubing*





## ► Thermo Scientific Storage Canes



**Storage canes accommodate a variety of tube sizes and types; available standard or stepped for optimal organization of your samples.**

### details

- For storage of Nalgene™ or Nunc™ cryostorage tubes
- Compatible with tubes protected with Cryoflex tubing
- Available color coders attach to the end of the cane and can be written on for quick identification and inventory management

### Storage Canes

Cat. No.	Description	Design	Length, mm (in.)	No. per Pack	No. per Case
378441	Nunc Storage Cane, aluminum	Standard	290 (11.3125)		50
5015-0001	Nalgene CryoCane, aluminum	Stepped	290 (11.3125)	12	48
5015-0002	Nalgene CryoCane, aluminum	Stepped	300 (11.8125)	12	48
DS5020-0000	Nalgene Storage Cane Coders, aluminum, white, 100/case	n/a	n/a		100



## ► Thermo Scientific Nalgene Mr. Frosty Freezing Container



Mr. Frosty available in three sizes

Nalgene™ Mr. Frosty containers provide a simple-to-use system designed to achieve a rate of cooling very close to  $-1^{\circ}\text{C}/\text{minute}$ , the optimal rate for cell preservation.

### details

- Three sizes accommodate volume range from 1-5 mL
- Holds 12 to 18 tubes and has profile height of 86 or 151 mm (3.4375 or 5.3125 in.), saving precious freezer space during the cooling process
- Screw top lid secures samples inside in the event of accidental container tipping
- Eliminates unreliable, improvised foam container devices
- Easy to use – requires only 100% isopropyl alcohol and a mechanical freezer
- Tubes do not contact alcohol; no wicking, label removal or compromise of hand printing

**Requires:** Isopropyl alcohol and a mechanical freezer.



Instructions conveniently printed on side

### Mr. Frosty Freezing Container

Cat. No.	Tube Compatibility, mL	Capacity, No. of Tubes	Dimensions H x O.D., mm (in.)	Color	No. per Case
5100-0001	1.0-2.0	18	86 x 117 (3-7/16 x 4-5/8)	clear / blue lid	1
5100-0036	3.6	12	151 x 117 (6 x 4-5/8)	clear / blue lid	1
5100-0050	4.5-5.0	12	151 x 117 (6 x 4-5/8)	clear / blue lid	1

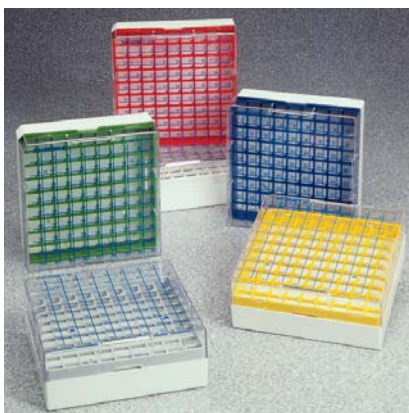


Mr. Frosty insert keeps tubes from contacting alcohol





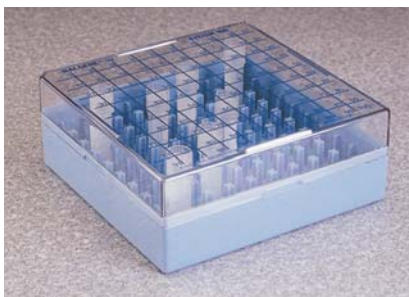
## ► Thermo Scientific Cryoboxes



Nalgene colored cryoboxes for up to 81 tubes



Nalgene cryoboxes for 25 to 81 tubes



Nalgene System 100 cryobox for up to 100 tubes



Nunc cardboard cryoboxes

**CryoBoxes from economical chipboard boxes to break-resistant, durable polycarbonate boxes.**

### details

- Durable plastic cryoboxes for short- or long-term storage
- Keyed lid on plastic cryoboxes prevent misalignment
- Printed grid for easy inventory management
- Plastic boxes autoclavable for decontamination and usable at temperature range from -196°C to +121°C
- Economical chipboard cryoboxes for short-term storage
- Chipboard boxes include dividers
- Vent in base for good drainage and air circulation
- Available with dividers from 25 to 169 tube storage
- See Dense Storage Options for details on 169-tube cryoboxes

### Cryoboxes

Cat. No.	Color	Capacity, No. of Tubes	Dimensions, L x W x H, mm (in.)	No. per Pack	No. per Case
867013-0240	Red	81	133 x 133 x 52 (5.25 x 5.25 x 2.13)	4	24
867013-0241	Yellow	81	133 x 133 x 52 (5.1 x 5.1 x 2)	4	24
867013-0242	Green	81	133 x 133 x 52 (5.1 x 5.1 x 2)	4	24
867013-0243	Blue	81	133 x 133 x 52 (5.1 x 5.1 x 2)	4	24
867013-0244	Gray	81	133 x 133 x 52 (5.1 x 5.1 x 2)	4	24
867013-0245	Assorted	81	133 x 133 x 52 (5.1 x 5.1 x 2)	4	24
5025-0505	White	25	76 x 76 x 52 (3 x 3 x 2)	8	48
5026-0909	White	81	133 x 133 x 52 (5.25 x 5.25 x 3.75)	4	24
5026-1010	White	100	133 x 133 x 52 (5.25 x 5.25 x 2.06)		10
5027-0909	White	81	133 x 133 x 95 (5.25 x 5.25 x 3.75)	4	24
374187	White	100	133 x 133 x 52 (5.25 x 5.25 x 2.13)	4	24
341483	White	100	132 x 132 x 52 (5.25 x 5.25 x 3.063)	4	24
330821	White	64	132 x 132 x 52 (5.25 x 5.25 x 2.13)	4	24
378247	White	25	75 x 75 x 51 (2.88 x 2.88 x 2)		24
378220	White	81	132 x 132 x 51 (5.25 x 5.25 x 2)		6
369639	White	81	132 x 132 x 51 (5.25 x 5.25 x 2)		48
369647	White	81	132 x 132 x 75 (5.25 x 5.25 x 2.88)		30
340053	White	100	145 x 145 x 51 (5.75 x 5.75 x 2)		42
340061	White	100	145 x 145 x 75 (5.75 x 5.75 x 2.88)		30



## ► Thermo Scientific Cryobox Freezer Racks

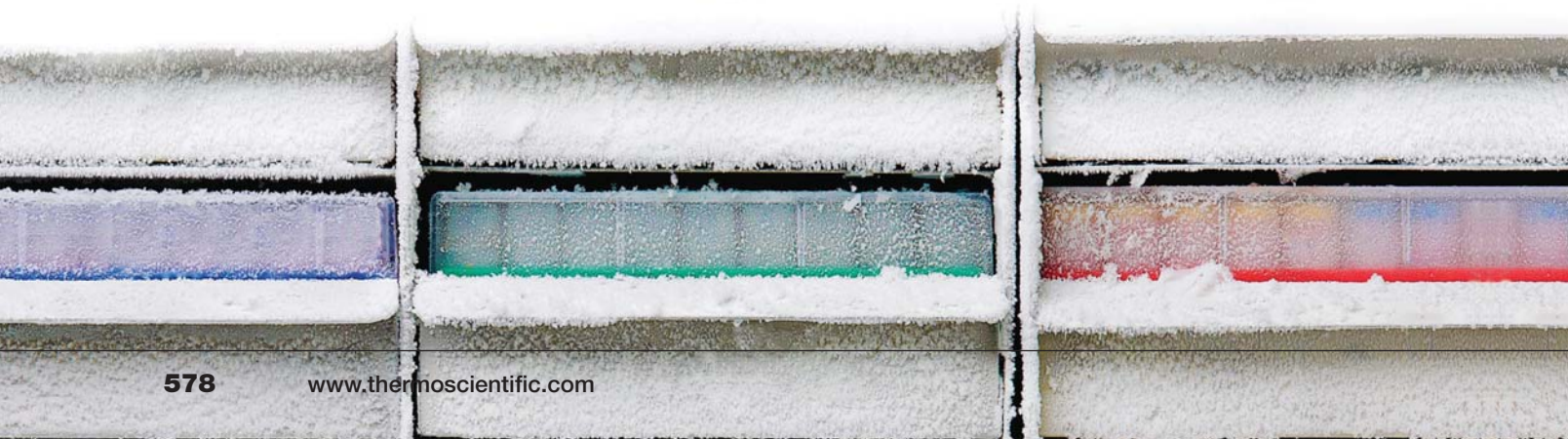


**Durable Nalgene™ stainless steel and Nunc™ aluminum racks conveniently store standard 5.25 x 5.25 in. (132 x 132 mm) cryoboxes.**

Freezer racks fit into most common upright and chest freezers.

### Cryobox Freezer Racks

Cat No.	Style	Capacity, Compartments	Dimensions, L x W x H, mm (in.)	No. per Pack	No. per Case
DS5037-0004	Vertical	4	14 x 14.3 x 40.6 (5.5 x 5.625 x 16)		1
DS5035-0004	Vertical	7	14 x 14.3 x 40.6 (5.5 x 5.625 x 27.75)		1
DS5035-0009	Vertical	4	8.3 x 8.4 x 22.5 (3.25 x 3.375 x 8.75)		1
5036-0004	Vertical	4	8.3 x 8.4 x 50.2 (3.25 x 3.375 x 19.75)		1
5036-0009	Vertical	9	14 x 14.3 x 22.5 (5.5 x 5.625 x 8.75)	1	4
5038-4322	Vertical	4	14 x 14.3 x 50.2 (5.5 x 5.625 x 19.75)	1	4
5038-4422	Horizontal	12	44.4 x 22.5 x 14.3 (8.875 x 5.625 x 17.5)		2
DS5037-0007	Horizontal	16	59.0 x 22.5 x 14.3 (8.875 x 5.625 x 23.25)		2
367000	Vertical	12	67 x 14.3 x 14 (26.5 x 5.625 x 5.531)		1





## ► Thermo Scientific Benchtop Coolers



Nunc™ -20°C labtop cooler



Nalgene™ -20°C labtop cooler

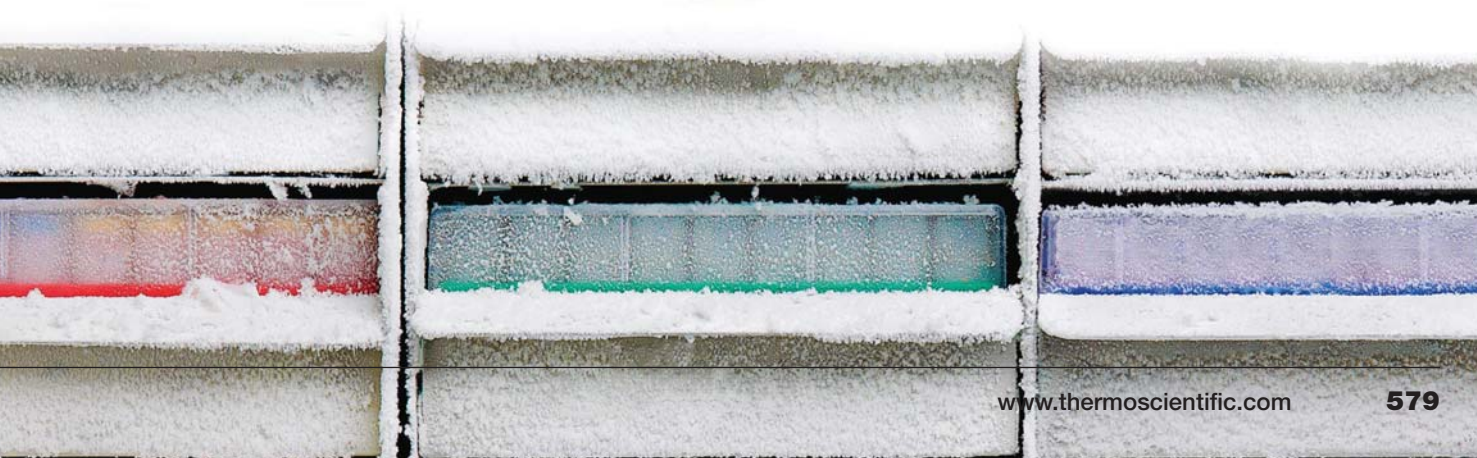
Our benchtop coolers protect enzymes, cells, reagents and solutions by maintaining freezer temperatures while on the laboratory bench.

### details

- Maintain freezer temperature during the frost-free cycle, power failure and accidental door opening
- Holds 12, 20 or 32 tubes
- Inserts are included for use with 0.2-0.5 mL microcentrifuge tubes
- Printed grid on one-way keyed lid for proper orientation and sample identification
- Molded of impact-resistant polycarbonate with locking handle for long-term use
- Stackable to save space

### Benchtop Coolers

Cat. No.	Style	Array	Temp. Rating	Holds Temp, Hours	Dimensions, L x W x H, mm (in.)	No. per Case
355501	non filled/clear	4 x 5	-20°C	<-15°C, 1	226 x 165 x 133 (8.9375 x 6.5 x 8.25)	1
DS5116-0012	non filled/clear	3 x 4	0°C	<1°C, 3.5	151 x 108 x 125 (5.3215 x 4.25 x 4.9375)	1
DS5116-0032	gel-filled/white	4 x 8	0°C	<1°C, 5.0	243 x 157 x 146 (9.5625 x 6.1875 x 5.75)	1
5115-0012	non filled/clear	3 x 4	-20°C	<-15°C, 1	151 x 108 x 125 (5.3125 x 4.25 x 4.9375)	1
5115-0032	gel-filled/white	4 x 8	-20°C	<-15°C, 2	243 x 157 x 146 (9.5625 x 6.1875 x 5.75)	1
5116-1300	Non-filled/clear	3 x 4	0°C	<1°C, 5.0	197 x 140 x 190 (7.75 x 5.5 x 7.5)	1
5116-1600	Non-filled/clear	3 x 4	0°C	<1°C, 5.0	197 x 140 x 190 (7.75 x 5.5 x 7.5)	1





**Thermo Scientific Products –**  
*meeting the challenges of science and industry*

# biological safety cabinets



## **Leading the way, so you can work in comfort and safety – every day.**

For decades, Thermo Scientific biological safety cabinets have been at the forefront of design, performance and safety innovation – enhancing the way you work in the lab. Our family of Class II offerings incorporates technical advances that ensure maximum safety, user comfort and energy savings:

- **Thermo Scientific HeraSafe KSP and Maxisafe 2020** – provide superior airflow filtration and easy filter exchange systems ideal for preparing cytotoxic drugs
- **Thermo Scientific HeraSafe KS and Safe 2020** – feature an advanced design for easy operation and maximum safety, ideal wherever protection is paramount
- **Thermo Scientific 1300 Series A2 and MSC-Advantage** – combine safety, energy efficiency and value for today's productive laboratory
- **Thermo Scientific 1300 Series B2** – designed and optimized for microbiological work with gases and volatile chemicals



For more product information, go to:  
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## ► Thermo Scientific Benchtop Dewars



**Benchtop Dewars are used for short-term storage of samples in liquid nitrogen, dry ice-solvent mixtures or ice water.**

### details

- High-density polyethylene base and cover with polyethylene-coated handle for strong, shatterproof performance
- Double-walled sides and CFC-free foam urethane insulation minimize heat leakage so samples stay cold longer
- Use from -196°C to +100°C
- Pour spout and bottom grip area for easy removal of used liquids
- Vented, insulated cover allows vapor escape but maintains sample temperature

### Specifications

Useful Laboratory Cooling Mixtures	Mixture Temperature <sup>†</sup>
Ice Water	0°C (32°F)
Sodium Chloride/Ice (33-g salt/81-g ice)	-21°C (-6°F)
Calcium Chloride/Ice (100-g salt/81-g ice)	-40°C (-40°F)
Chloroform/Liquid Nitrogen (slush)	-64°C (-83°F)
Dry Ice/Acetone	-78°C (-108°F)
Dry Ice/Isopropanol	-78°C (-108°F)
Toluene/Liquid Nitrogen (slush)	-95°C (-139°F)
Pentane/Liquid Nitrogen (slush)	-130°C (-202°F)
Isopentane/Liquid Nitrogen (slush)	-160°C (-256°F)
Liquid Nitrogen	-196°C (-320°F) <sup>‡</sup>

<sup>†</sup> The actual mixture temperature is affected by impurities, and therefore is approximate.

<sup>‡</sup> Caution: At these low temperatures, the flask will withstand thermal shock but becomes brittle.

Avoid dropping heavy objects into flask, otherwise use it freely at these temperatures.

### Benchtop Dewars

Cat. No.	Capacity, L	Dimensions, Depth x Mouth I.D. x H, mm (in.)	No. per Pack	No. per Case
4150-1000	1	195 x 96 x 251 (7.7 x 3.8 x 9.9)	1	4
4150-2000	2	231 x 122 x 282 (9.1 x 4.8 x 11.1)	1	2
4150-4000	4	295 x 158 x 353 (11.6 x 6.2 x 13.9)	1	2
4150 9000	10	396 x 198 x 470 (15.6 x 7.8 x 18.5)		1

**Thermo Scientific Products –**  
*meeting the challenges of science and industry*

# cold storage

**We're obsessed with sample integrity.**

**That's why Thermo Scientific cold storage products offer a complete range of products built for maximum sample protection.**

Our ultra-low temperature freezers, lab refrigerators and freezers, and our cryogenic storage solutions deliver everything you expect for worry-free performance, year-after-year:

- Advanced construction, technologies and user interface features for dependable operation and sample security
- Innovative design that maximizes storage capacity per footprint
- Eco-friendly refrigerants and materials to ensure operational responsibility as well as energy efficiency



For more product information, go to:  
**[www.thermoscientific.com/cold](http://www.thermoscientific.com/cold)**





## ► Thermo Scientific Matrix 2D Barcoded ScrewTop Storage Tubes and Caps



Matrix 2D barcoded screwtop tubes



Matrix amber 2D tubes



Thermo Scientific decapper caps and decaps 8 tubes at a time

**Matrix™ 2D Barcoded ScrewTop Storage Tubes are optimized for secure sample storage at low temperatures, including vapor phase liquid nitrogen.**

Available in 0.5 mL through 12 mL volume capacity, these tubes are molded from medical grade resins and the proprietary barcoding process produces a permanent, high contrast 2D barcode, offering maximum reliability and traceability of valuable samples. Used in combination with VisionMate 2D barcode readers, manual and automated capping equipment, and labelling options, the 2D ScrewTop Tubes meet a range of manual and automated long-term storage needs.

Proprietary barcoding process applies a permanent 2D barcode on the Thermo Scientific storage tracking products allowing secure tracking and storage of valuable samples, ranging in volumes from 0.5 mL through 12 mL. Complemented by a comprehensive range of manual or integrated capping/decapping equipment, VisionMate linear and 2D barcode readers and labelling accessories, the ScrewTop tubes and accessories can meet your storage needs for a range of applications.

### details

#### Secure Tracking

- Solid one piece construction eliminates the risk of labels falling off during storage, even when used at cryogenic temperatures
- Permanently attached, laser-etched 2D barcode on the bottom of each tube allows you to scan and decode tubes at once without removing them from the rack, and allows data to be associated with each tube
- A range of VisionMate readers accommodates single tube to full rack reading to meet various throughput requirements. Further maximizing flexibility, barcode data can be easily inputted into a range of database or application formats
- VisionMate reader software includes built in error correction to avoid barcode misreads
- ScrewTop tubes are autoclavable with caps loosened
- Tube material: Virgin class VI medical grade polypropylene
- Racks are constructed of Acrylonitrile butadiene styrene (ABS)
- Cap material: Virgin class VI medical grade polypropylene with virgin class VI medical grade silicone O-ring
- ScrewTop Tubes are compatible with storage at a wide temperature range of -180° through +121°C

#### Superior Storage Format

- Supplied in a standard microplate format latch racks, storage space can be maximized and tubes can be easily used with existing multichannel manual pipettes or automated liquid handling equipment
- Latch Rack design allows samples to be stored securely and enables one-hand operation during pipetting applications
- Several capping/decapping options are available to meet various throughput levels and manual or automated procedures. Available options include single tube, 8- tube, or 96 simultaneous cap application and removal
- 12 mL tube allows microplate format storage of large volumes, including clinical samples, powders, tissue, and plant materials, while still compatible with the range of accessory equipment



## ► Thermo Scientific Matrix 2D Barcoded ScrewTop Storage Tubes and Caps continued

### details

#### Stringent Quality Control

- Every 2D barcode is scanned for readability and checked against a full database of all previous 2D barcodes to ensure there are zero duplicates across the entire Thermo Scientific Matrix storage tube product line
- Each tube is leak tested to ensure tube integrity and the security of your samples
- 100% quality control checks that every code is unique and readable
- All tubes and trays are supplied free from DNA, RNase, DNase, and endotoxins

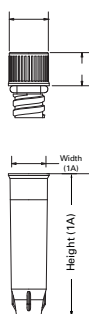


Fig. 1A

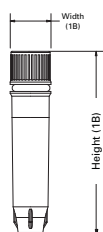


Fig. 1B

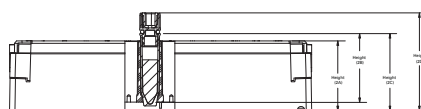


Fig. 2

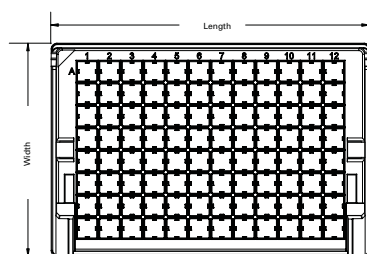


Fig. 3

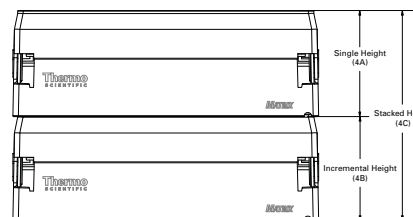
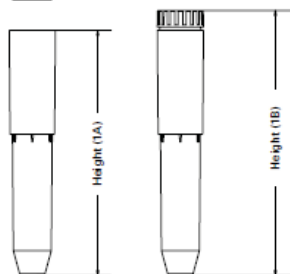
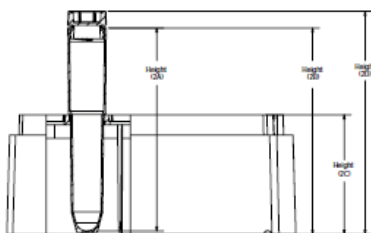


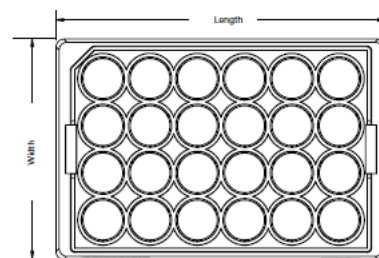
Fig. 4



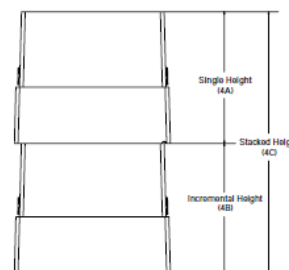
▲ Figure 1: Tube Side View



▲ Figure 2: Rack Side View



▲ Figure 3: Rack Top View



▲ Figure 4: Stacked Rack View

Matrix 2D Barcoded ScrewTop Tubes and Caps

Description		0.5 mL ScrewTop Storage Tubes	1.0 mL ScrewTop Storage Tubes	12.0 mL ScrewTop Storage Tubes
Item No.		3743, 3744, 3745	3740, 3741, 3742	3775, 3778
Figure 1A: Tube Side View	Width (1A)	7.40±0.10 [0.290±0.002]	7.40±0.10 [0.290±0.002]	—
	Height (1A)	30.60±0.20 [1.204±0.007]	44.00±0.10 [1.732±0.003]	95.25±0.08 [3.750±0.003]
Figure 1B: Tube Side View w/ ScrewTop	Width (1B)	8.70±0.10 [0.344±0.003]	8.70±0.10 [0.344±0.003]	—
	Height (1B)	39.20 [1.543]	52.60 [2.071]	102.97±0.20 [4.054±0.008]
Figure 2: Rack Side View	Height (2A)	29.50±0.10 [1.160±0.005]	38.10±0.10 [1.500±0.005]	94.50±0.20 [3.720±0.008]
	Height (2B)	29.10±0.10 [1.145±0.005]	42.50±0.20 [1.673±0.008]	96.00±0.20 [3.780±0.008]
	Height (2C)	32.60±0.30 [1.282±0.012]	46.00±0.20 [1.809±0.008]	55.60±0.13 [2.190±0.005]
	Height (2D)	41.30±0.40 [1.626±0.017]	54.60±0.30 [2.149±0.110]	103.73±0.33 [4.084±0.130]
Figure 3: Rack Top View	Length	127.75±0.13 [5.029±0.005]	127.75±0.13 [5.029±0.005]	127.76±0.13 [5.030±0.005]
	Width	85.46±0.13 [3.364±0.005]	85.46±0.13 [9.964±0.005]	85.47±0.13 [3.365±0.005]
Figure 4: Stacked Rack View	Single Height (4A)	44.32±0.25 [1.745±0.010]	58.42±0.25 [2.300±0.010]	107.82±0.25 [4.245±0.010]
	Incremental Height (4B)	43.31±0.25 [1.705±0.010]	57.30±0.25 [2.220±0.010]	106.30±0.25 [4.185±0.010]
	Stacked Height (4C)	87.63±0.51 [3.450±0.020]	114.81±0.51 [4.520±0.020]	214.12±0.51 [8.430±0.020]





## ► Thermo Scientific Matrix 2D Barcoded ScrewTop Storage Tubes and Caps continued

### Matrix 2D Barcoded ScrewTop Tubes and Caps

Cat. No.	Description	Cap Color	Size, mL	Sterile	Bulk	No. per Case
<b>500 µL V-Bottom ScrewTop Tubes, Bulk, 480/Cs. 480 tubes/ Case</b>						
3743MTX	Clear ScrewTop Tube	Clear	0.5	X	X	480 tubes/ Case
3743BLU-MTX	Clear ScrewTop Tube	Blue	0.5	X	X	480 tubes/ Case
3743GRE-MTX	Clear ScrewTop Tube	Green	0.5	X	X	480 tubes/ Case
3743PUR-MTX	Clear ScrewTop Tube	Purple	0.5	X	X	480 tubes/ Case
3743RED-MTX	Clear ScrewTop Tube	Red	0.5	X	X	480 tubes/ Case
3743WHI-MTX	Clear ScrewTop Tube	White	0.5	X	X	480 tubes/ Case
3743YEL-MTX	Clear ScrewTop Tube	Yellow	0.5	X	X	480 tubes/ Case
<b>500 µL V-Bottom ScrewTop Tubes, 5 Racks of 96/Cs.</b>						
3744MTX	Clear ScrewTop Tube	Clear	0.5	X		5 Latch Racks of 96/ Case
3744BLU-MTX	Clear ScrewTop Tube	Blue	0.5	X		5 Latch Racks of 96/ Case
3744GRE-MTX	Clear ScrewTop Tube	Green	0.5	X		5 Latch Racks of 96/ Case
3744PUR-MTX	Clear ScrewTop Tube	Purple	0.5	X		5 Latch Racks of 96/ Case
3744RED-MTX	Clear ScrewTop Tube	Red	0.5	X		5 Latch Racks of 96/ Case
3744WHI-MTX	Clear ScrewTop Tube	White	0.5	X		5 Latch Racks of 96/ Case
3744YEL-MTX	Clear ScrewTop Tube	Yellow	0.5	X		5 Latch Racks of 96/ Case
3743AMB	Amber ScrewTop Tube	Red	0.5	X		5 Latch Racks of 96/ Case
3745MTX	Clear ScrewTop Tube	no cap	0.5	X		5 Latch Racks of 96/ Case
3744AMB	Amber ScrewTop Tube	no cap	0.5	X		5 Latch Racks of 96/ Case
<b>1.0 mL V-Bottom ScrewTop Tubes, Bulk, 480/Cs.</b>						
3740MTX	Clear ScrewTop Tube	Clear	1.0	X	X	480 tubes/ Case
3740BLU-MTX	Clear ScrewTop Tube	Blue	1.0	X	X	480 tubes/ Case
3740GRE-MTX	Clear ScrewTop Tube	Green	1.0	X	X	480 tubes/ Case
3740PUR-MTX	Clear ScrewTop Tube	Purple	1.0	X	X	480 tubes/ Case
3740RED-MTX	Clear ScrewTop Tube	Red	1.0	X	X	480 tubes/ Case
3740WHI-MTX	Clear ScrewTop Tube	White	1.0	X	X	480 tubes/ Case
3740YEL-MTX	Clear ScrewTop Tube	Yellow	1.0	X	X	480 tubes/ Case
<b>1.0 mL V-Bottom ScrewTop Tubes, 5 Racks of 96/Cs.</b>						
3741MTX	Clear ScrewTop Tube	Clear	1.0	X		5 Latch Racks of 96/ Case
3741BLU-MTX	Clear ScrewTop Tube	Blue	1.0	X		5 Latch Racks of 96/ Case
3741GRE-MTX	Clear ScrewTop Tube	Green	1.0	X		5 Latch Racks of 96/ Case
3741PUR-MTX	Clear ScrewTop Tube	Purple	1.0	X		5 Latch Racks of 96/ Case
3741RED-MTX	Clear ScrewTop Tube	Red	1.0	X		5 Latch Racks of 96/ Case
3741WHI-MTX	Clear ScrewTop Tube	White	1.0	X		5 Latch Racks of 96/ Case
3741YEL-MTX	Clear ScrewTop Tube	Yellow	1.0	X		5 Latch Racks of 96/ Case
3741AMB	Amber ScrewTop Tube	Red	1.0	X		5 Latch Racks of 96/ Case
3742MTX	Clear ScrewTop Tube	no cap	1.0	X		5 Latch Racks of 96/ Case
3742AMB	Amber ScrewTop Tube	no cap	1.0	X		5 Latch Racks of 96/ Case
<b>12.0 mL V-Bottom ScrewTop Tubes</b>						
3770	Clear ScrewTop Tube	Clear	12.0	X	X	100 Tubes/Case
3775	Clear ScrewTop Tube	Clear	12.0	X		4 Latch Racks of 24/Case
3778	Clear ScrewTop Tube	no cap	12.0	X		4 Latch Racks of 24/Case

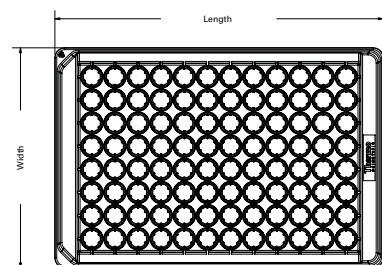


Fig. 1

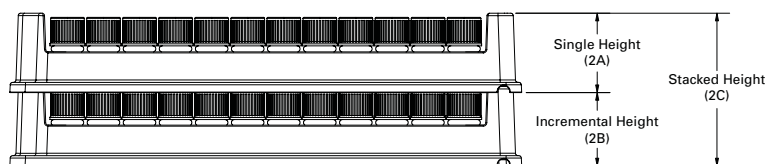


Fig. 2

**Matrix 2D Barcoded ScrewTop Cap Tray**

Description		ScrewTop Cap Tray
<b>Item No.</b>		<b>4906, 4477 (All Colors)</b>
Figure 1: Tray Top View	Length	127.75±0.25 [5.03±0.010]
	Width	85.580.25± [3.37±0.010]
Figure 2: Stacked Tray View	Single Height (2A)	19.81±0.13 [0.78±0.005]
	Incremental Height (2B)	18.29±0.25 [0.72±0.010]
	Stacked Height (2C)	38.10±0.25 [1.50±0.010]

**Caps for 500 µL and 1.0 mL ScrewTop Tubes**

Cat. No.	Cap Color	Compatible with Tube Volumes	No. per Case
4470MTX	Colorless	0.5 mL; 1.0 mL	500
4470BLUE-MTX	Blue	0.5 mL; 1.0 mL	500
4470GRE-MTX	Green	0.5 mL; 1.0 mL	500
4470PUR-MTX	Purple	0.5 mL; 1.0 mL	500
4470RED-MTX	Red	0.5 mL 1.0 mL	500
4470WHI-MTX	White	0.5 mL; 1.0 mL	500
4470YEL-MTX	Yellow	0.5 mL; 1.0 mL	500

**Caps for 12 mL ScrewTop Tubes, 100/Cs.**

4440MTX	Solid	12.0 mL	100
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**ScrewTop Tube Cap Tray**

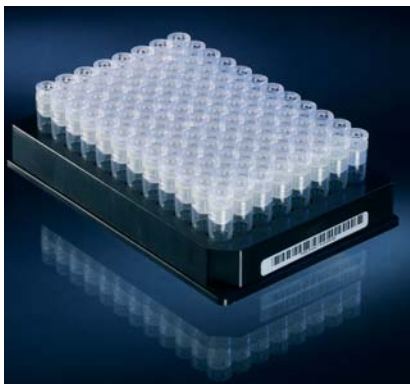
4477-MTX	Colorless	0.5 mL 1.0 mL	5 cap trays of 96
4477BLU-MTX	Blue	0.5 mL 1.0 mL	5 cap trays of 96
4477GRE-MTX	Green	0.5 mL; 1.0 mL	5 cap trays of 96
4477PUR-MTX	Purple	0.5 mL; 1.0 mL	5 cap trays of 96
4477RED-MTX	Red	0.5 mL; 1.0 mL	5 cap trays of 96
4477WHI-MTX	White	0.5 mL; 1.0 mL	5 cap trays of 96
4477YEL-MTX	Yellow	0.5 mL; 1.0 mL	5 cap trays of 96
4906-MTX	without caps, tray only	0.5 mL; 1.0 mL	5 cap trays

**Color Inserts for 500 µL and 1.0 mL ScrewTop Tube Caps**

4471MTX	Red	0.5 mL; 1.0 mL	500 inserts
4472MTX	Yellow	0.5 mL; 1.0 mL	500 inserts
4473MTX	Blue	0.5 mL; 1.0 mL	500 inserts
4474MTX	Green	0.5 mL; 1.0 mL	500 inserts
4475MTX	White	0.5 mL; 1.0 mL	500 inserts
4476MTX	Purple	0.5 mL; 1.0 mL	500 inserts



## ► Thermo Scientific Nunc Cryobank Tube Systems



*Nunc Cryobank 1.0 mL tubes*



*Nunc Cryobank tubes in universal rack for easy tube handling*



*Cryobank tubes in use*

**Nunc™ Cryobank storage tubes take traditional cryostorage to the next level with laser etched 2D barcodes and standard microplate format racks, offering greater storage capability compared to standard cryoboxes.**

Compatible with the complete line of 2D barcode readers, capping/ decapping equipment and labelling options, Cryobank tubes can be used in manual or automated storage of diagnostic and biological samples down to vapor phase liquid nitrogen. Cryobank products are available in a volume range of 0.5 mL through 5.0 mL, and complemented by a range of certifications.

### details

Nunc Cryobank tubes take traditional cryostorage to the next level with higher density storage format and reliable 2D barcode traceability. Compatible with the complete line of 2D barcode readers, capping/ decapping equipment, and labelling options, Cryobank products are a perfect match for biological, genomic, and diagnostic sample storage.

#### Secure Tracking

- Permanently attached, laser etched 2D barcode on the bottom of the tube allows you to scan and decode the entire rack at once without removing them from the rack, and allows data to be associated with each tube
- Solid one piece construction eliminates the risk of labels falling off during cryogenic storage, preserving the identity of valuable sample material
- Utilize a range of 2D reading products to decode individual tubes or complete microplate footprint racks. Readers allow flexible output to store data in multiple database formats

#### Superior Storage Format

- Cryobank tubes are available in space conscious microplate format racks or can be stored in traditional cryoboxes, accommodating your preferred storage format
- Microplate format is compatible with your existing multichannel manual pipettes and automated liquid handling equipment
- Unique anti-rotation feature allows compatibility with automated decapping/ capping equipment in single, 8-channel, or full-rack options to accommodate multiple throughput requirements.
- TPE gasketed polypropylene cap provides superior seal during high or low temperature storage
- Low-binding surface allows maximum recovery of low concentration samples

#### Certified to meet your storage needs

- CE certified and conforms to IATA requirements for diagnostic use and transportation
- Certified DNase, RNase, pyrogene and toxin free
- Sterility assurance level  $10^{-6}$  for the most sensitive sample storage

#### Stringent Quality Control

- 2D barcodes are scanned for readability and checked against a full database of previous barcodes to ensure no duplicates across the Cryobank storage tube product line.
- Leak testing validation performed during the manufacturing process to ensure sample integrity is maintained



## Nunc Cryobank and Bank-It Tube Systems

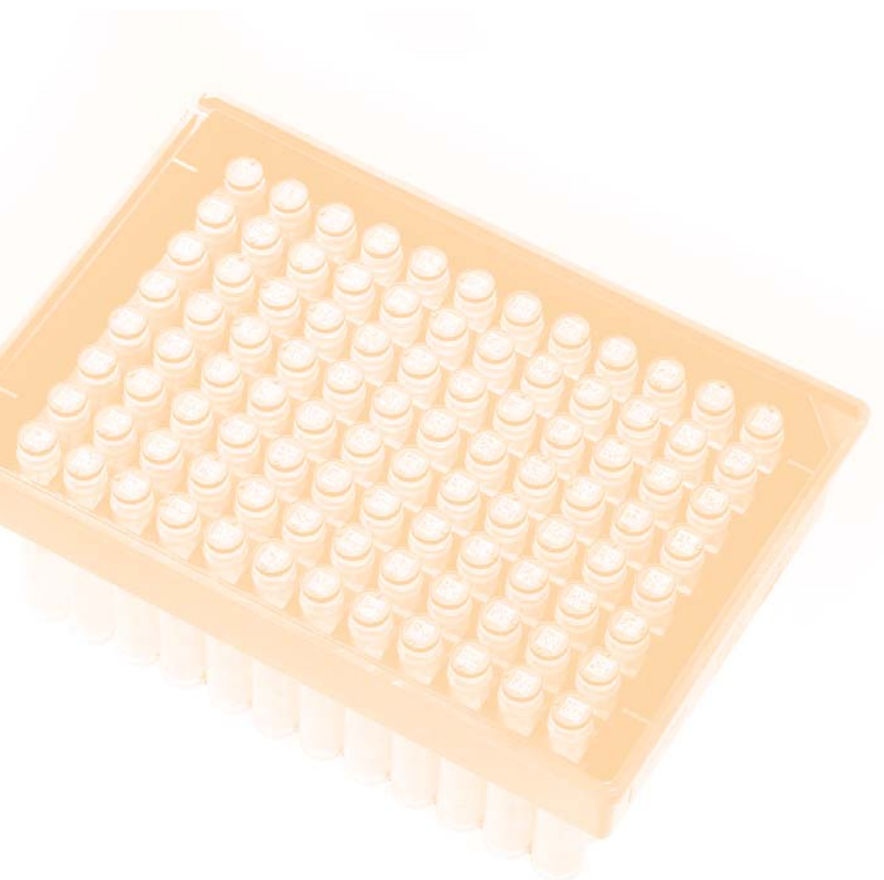
Cat No	Description	Capped	Size, mL	Bottom	Sterile	Racked	Bulk	No. per Case
374025	Clear Cryobank Tube, Blue Cap	X	0.5	flat	X	X		10 racks of 96 tubes/case
374026	Clear Cryobank Tube, Red Cap	X	0.5	flat	X	X		10 racks of 96 tubes/case
374027	Clear Cryobank Tube, Green Cap	X	0.5	flat	X	X		10 racks of 96 tubes/case
374080	Clear Cryobank Tube, Clear Cap	X	0.5	flat	X		X	10 bags of 96 tubes/case
374082	Clear Cryobank Tube, Clear Cap	X	0.5	flat	X	X		2 racks of 96 tubes/case
374086	Clear Cryobank Tube, Clear Cap	X	0.5	flat	X	X		10 racks of 96 tubes/case
374074	Clear Bank-It Tube, Clear Cap	X	0.5	flat	X	X		10 racks of 96 tubes/case
374075	Clear Bank-It Tube, Clear Cap	X	0.5	flat	X	X		10 racks of 96 tubes/case
374083	Clear Cryobank Tube, Clear Cap, Uncoded	X	0.5	flat	X	X		2 racks of 96 tubes/case
374087	Clear Cryobank Tube, Clear Cap, Uncoded	X	0.5	flat	X	X		10 racks of 96 tubes/case
374099	Clear Cryobank Tube, Red Cap, Uncoded	X	0.5	flat	X	X		10 racks of 96 tubes/case
374100	Clear Cryobank Tube, Blue Cap, Uncoded	X	0.5	flat	X	X		10 racks of 96 tubes/case
374081	Clear Cryobank Tube, Clear Cap	X	1.0	flat	X		X	10 bags of 96 tubes/case
374084	Clear Cryobank Tube, Clear Cap	X	1.0	flat	X	X		2 racks of 96 tubes/case
374088	Clear Cryobank Tube, Clear Cap	X	1.0	flat	X	X		10 racks of 96 tubes/case
374110	Clear Cryobank Tube, Green Cap	X	1.0	flat	X	X		10 racks of 96 tubes/case
374120	Clear Cryobank Tube, Red Cap	X	1.0	flat	X	X		10 racks of 96 tubes/case
374130	Clear Cryobank Tube, Blue Cap	X	1.0	flat	X	X		10 racks of 96 tubes/case
374079	Clear Bank-It Tube, Clear Cap	X	1.0	flat	X	X		10 racks of 96 tubes/case
374085	Clear Cryobank Tube, Clear Cap, Uncoded	X	1.0	flat	X	X		2 racks of 96 tubes/case
374089	Clear Cryobank Tube, Clear Cap, Uncoded	X	1.0	flat	X	X		10 racks of 96 tubes/case
374094	Clear Cryobank Tube, Clear Cap, Alphacode	X	1.0	flat	X	X		10 racks of 96 tubes/case
374131	Clear Cryobank Tube, Gray Cap	X	2.0	flat	X		X	20 bags of 48 tubes/case
374132	Clear Cryobank Tube, Yellow Cap	X	2.0	flat	X		X	20 bags of 48 tubes/case
374133	Clear Cryobank Tube, Blue Cap	X	2.0	flat	X		X	20 bags of 48 tubes/case
374134	Clear Cryobank Tube, Green Cap	X	2.0	flat	X		X	20 bags of 48 tubes/case
374135	Clear Cryobank Tube, Red Cap	X	2.0	flat	X		X	20 bags of 48 tubes/case
374221	Clear Cryobank Tube, Clear Cap	X	2.0	flat	X	X		10 racks of 48 tubes/case
374258	Clear Cryobank Tube, Clear Cap	X	2.0	flat	X		X	20 bags of 48 tubes/case
374259	Clear Cryobank Tube, Clear Cap, Uncoded	X	2.0	flat	X		X	20 bags of 48 tubes/case
374223	Clear Cryobank Tube, Clear Cap, Uncoded	X	2.0	flat	X	X		10 racks of 48 tubes/case
374223	Clear Cryobank Tube, Clear Cap, Uncoded	X	2.0	flat	X	X		10 racks of 48 tubes/case
374220	Clear Cryobank Tube, Clear Cap	X	5.0	flat	X	X		10 racks of 48 tubes/case
374260	Clear Cryobank Tube, Clear Cap, Uncoded	X	5.0	flat	X		X	11 bags of 48 tubes/case
374261	Clear Cryobank Tube, Clear Cap	X	5.0	flat	X		X	11 bags of 48 tubes/case
374222	Clear Cryobank Tube, Clear Cap, Uncoded	X	5.0	flat	X	X		10 racks of 48 tubes/case
374222	Clear Cryobank Tube, Clear Cap, Uncoded	X	5.0	flat	X	X		10 racks of 48 tubes/case



## ► Thermo Scientific Nunc Cryobank and Vial Systems continued

### Nunc Cryobank and Bank-It Tube Accessories

Cat. No.	Description	Color	Sterile	Packaging
374017	Nunc Cryobank Caps for 0.5 mL and 1.0 mL Cryobank and Bank-it Tubes, Natural, 10 racks of 96/case, Irradiated	Natural	Yes-Irradiated	10 racks of 96/case, Irradiated
374018	Nunc Cryobank Caps for 0.5 mL and 1.0 mL Cryobank and Bank-it Tubes, Green, 10 racks or 96/case	Green	No	10 racks of 96/case, Irradiated
374019	Nunc Cryobank Caps for 0.5 mL and 1.0 mL Cryobank and Bank-it Tubes, Red, 10 racks or 96/case	Red	No	10 racks of 96/case, Irradiated
374021	Nunc Cryobank Caps for 0.5 mL and 1.0 mL Cryobank and Bank-it Tubes, Blue, 10 racks or 96/case	Blue	No	10 racks of 96/case, Irradiated
367014	Nunc Cryobank and Bank-it 74 cm rack accommodates (19) 0.5 mL Cryobank or Bank-it Racks or (13) 1.0 mL Cryobank or Bank-it Racks, 1 each			1 each
374009	Nunc Cryobank and Bank-it Rack, Tube Press out Tool, 1 Each			1 each





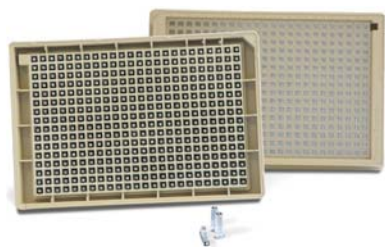
## ► Thermo Scientific Matrix 2D Barcoded Storage Tubes



Wide variety of volumes and formats



Glass tubes with 2D barcode



Low-volume 384-format



Low-volume tubes with 2D barcode

**Matrix 2D Barcoded Storage Tubes allow robust storage and tracking of sample volumes ranging from 0.1 mL to 1.4 mL in 96- and 384- format.**

Tubes are molded from medical grade resins and the proprietary barcoding process produces a permanent, high contrast 2D barcode, offering maximum reliability and traceability of compound, biological, and genomic samples. Available with a range of sealing options and used with Thermo Scientific VisionMate® barcode readers, the Matrix 2D barcoded storage tubes can improve a range of sample management needs and workflows.

### details

#### Secure Tracking

- A permanently-bonded, unique 2D barcode is laser-etched onto the base of every Matrix 2D barcoded storage tube to enable secure sample identification and tracking
- A range of VisionMate 2D barcode readers is available to meet your application and throughput needs
- VisionMate systems are flexible enough to allow 2D barcode data to be integrated into various applications, databases, and automated systems
- Once sample data is stored, just scan the tube using the database Find feature to instantly access sample information and identify the contents of each storage tube

#### Superior Storage Rack Design

- Unlike traditional storage tubes or blocks, Matrix 96-format 2D barcoded storage tubes are available in proprietary, stackable, microplate footprint Latch Racks to save precious space in your freezer, refrigerator, compound store or on the bench top
- The latch rack design enables manual multichannel pipette access to 2D tubes and eliminates contamination risk with lid design that does not contact the benchtop
- The latch rack lid can be lifted robotically for 2D tube access with automated equipment and high-throughput applications

#### Stringent Quality Control

- Every 2D barcoded storage tube is scanned to guarantee readability and each code is checked against a full database of all previously assigned 2D codes to ensure zero duplicates across the entire line of Matrix 2D barcoded storage tubes
- Every storage tube is leak tested to ensure the integrity and security of samples

#### Storage Tracking Solutions for Any Laboratory

- Available with a range of sealing options including solid and pre-slit Duraseals™ and Sepraseals to meet your individual storage requirements
- Glass tubes can be used for storing samples in DMSO, chlorinated solvents and other harsh chemicals and applications where newly synthesized compounds that need to be dried down or lyophilized
- Custom 2D coding options are available to meet your laboratory's individual database or tracking requirements
- 2D storage tubes are compatible with Thermo Scientific freezer racks that allow optimal utilization of storage space

**Recommended for:** Individual sample retrieval; instant sample identification; secure identification of archived samples; secure shipping of samples; storage of genomic samples, DMSO dissolved compounds or any other samples; and tracking of samples during manufacturing storage of biological material.



## ► Thermo Scientific Matrix 2D Barcoded Storage Tubes

### 0.5 - 1.4 mL Tubes



Fig. 1: Tube Side View

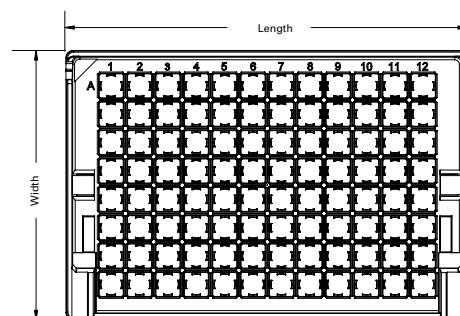


Fig. 3: Rack Top View

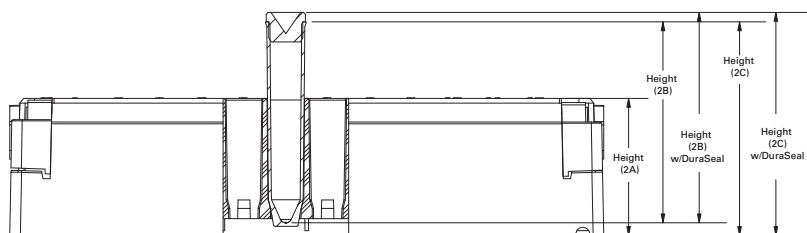


Fig. 2: Rack Side View

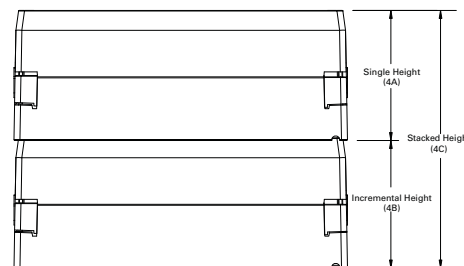


Fig. 4: Stacked Rack View

### Matrix\* 2D Barcoded Storage Tubes

Description		0.1 mL Storage Tubes	0.5 mL Storage Tubes	0.5 mL Storage Tubes with DuraSeal Installed	1.4 mL Storage Tubes	1.4 mL Storage Tubes with DuraSeal Installed	1.4 mL Storage Tubes with Human Readable Code
<b>Cat No.</b>		<b>3815</b>	<b>3734, 3735, 4898</b>	<b>3736, 3737, 4899</b>	<b>3791, 3792, 4890</b>	<b>3801, 4890</b>	<b>3711, 3112, 4890</b>
Figure 1: Tube Side View	Width (1A)	4.2 mm [0.17]	8.74 ± 0.08 [0.344 ± 0.003]	8.74±0.08 [0.344±0.003]	8.74±0.08 [0.344±0.003]	8.74±0.08 [0.344±0.003]	8.74±0.08 [0.344±0.003]
	Width (1B)	—	6.83±0.05 [0.269±0.002]	8.43±0.13 [0.332±0.005]	6.83±0.05 [0.269±0.002]	8.43±0.13 [0.332±0.005]	6.83±0.05 [0.269±0.002]
	Height	15 mm [0.5901]	21.38±0.08 [0.842±0.003]	23.39±0.20 [0.921±0.008]	43.99±0.08 [1.732±0.003]	46.01±0.20 [1.811±0.008]	43.99±0.08 [1.732±0.003]
Figure 2: Rack Side View	Height (2A)	18.6 mm [0.732]	14.22±0.13 [0.560±0.005]	14.22±0.13 [0.560±0.005]	29.46±0.13 [1.160±0.005]	29.46±0.13 [1.160±0.005]	29.46±0.13 [1.160±0.005]
	Height (2B)	14 mm [0.551]	20.929±0.08 [0.824±0.003]	20.929±0.08 [0.824±0.003]	43.231±0.08 [1.702±0.003]	43.231±0.08 [1.702±0.003]	43.332±0.20 [1.710±0.010]
	Height (2C)	16.5 mm [0.469]	22.07±0.20 [0.869 ± 0.008]	24.08±0.33 [0.948±0.013]	45.95±0.20 [1.809±0.008]	47.96±0.01 [1.888±0.001]	45.949±0.20 [1.810±.010]
Figure 3: Rack Top View	Length	127.76 mm [5.03]	127.76±0.13 [5.030±0.005]	127.76±0.13 [5.030±0.005]	127.76±0.13 [5.030±0.005]	127.76±0.13 [5.030±0.005]	127.76±0.13 [5.030±0.005]
	Width	85.47 mm [3.364]	85.47±0.13 [3.365±0.005]	85.47±0.13 [3.365±0.005]	85.47±0.13 [3.365±0.005]	85.47±0.13 [3.365±0.005]	85.47±0.13 [3.365±0.005]
Figure 4: Stacked Rack View	Single Height (4A)	18.6 mm [0.771]	25.96±0.25 [1.022±0.010]	27.48±0.25 [1.082±0.010]	49.84±0.25 [1.962±0.010]	49.84±0.25 [1.962±0.010]	49.84±0.25 [1.962±0.010]
	Incremental Height (4B)	18.6 mm [0.771]	22.61±.010 [0.890±0.250]	26.42±0.25 [1.040±0.010]	48.82±0.25 [1.922±0.010]	48.82±0.25 [1.922±0.010]	48.82±0.25 [1.922±0.010]
	Stacked Height (4C)	37.2 mm [1.464]	48.56±0.51 [1.912±0.020]	53.90±0.51 [2.122±0.020]	98.65±0.51 [3.884±0.020]	98.65±0.51 [3.884±0.020]	98.65±0.51 [3.884±0.020]

**Matrix 2D Barcoded Storage Tubes**

Cat No	Description	Size, mL	Format	Sterile	Duraseal Installed	Racked	Bulk	No. Per Case
3710MTX	Matrix, 2D barcoded w/ human readable code	1.4	96				X	1000 tubes/ Case
3711MTX	Matrix, 2D barcoded w/ human readable code	1.4	96			X		10 Latch Racks of 96 tubes/case
3712MTX	Matrix, 2D barcoded w/ human readable code	1.4	96	X		X		10 Latch Racks of 96 tubes/case
3713MTX	Matrix, 2D barcoded w/ human readable code	1.4	96			X		10 Latch Racks of 96 tubes/case
3714MTX	Matrix, 2D barcoded w/ human readable code	1.4	96	X		X		10 Latch Racks of 96 tubes/case
3729MTX	Matrix, 2D barcoded	0.75	96		X	X		10 Latch Racks of 96 tubes/case
3730MTX	Matrix, 2D barcoded	0.75	96				X	1000 tubes/ Case
3731MTX	Matrix, 2D barcoded	0.75	96			X		10 Latch Racks of 96 tubes/case
3732MTX	Matrix, 2D barcoded	0.75	96	X		X		10 Latch Racks of 96 tubes/case
3734MTX	Matrix, 2D barcoded	0.5	96			X		10 Latch Racks of 96 tubes/case
3735MTX	Matrix, 2D barcoded	0.5	96	X		X		10 Latch Racks of 96 tubes/case
3736MTX	Matrix, 2D barcoded	0.5	96		X	X		10 Latch Racks of 96 tubes/case
3737MTX	Matrix, 2D barcoded	0.5	96	X	X	X		10 Latch Racks of 96 tubes/case
3750MTX	Matrix, 2D barcoded	0.5	96				X	960 tubes /Case
3790MTX	Matrix, 2D barcoded	1.4	96				X	1000 tubes /Case
3791MTX	Matrix, 2D barcoded	1.4	96			X		10 Latch Racks of 96 tubes/case
3792MTX	Matrix, 2D barcoded	1.4	96	X		X		10 Latch Racks of 96 tubes/case
3794MTX	Matrix, 2D barcoded	1.4	96			X		10 Latch Racks of 96 tubes/case
3801MTX	Matrix, 2D barcoded	1.4	96		X	X		10 Latch Racks of 96 tubes/case
3850MTX	Matrix, 2D barcoded, glass	1.0	96			X		5 Latch Racks of 96 tubes/case
3815MTX	Matrix, 2D barcoded	0.1	384			X		20 racks of 384 tubes/case

**Empty Racks for Matrix 2D Barcoded Storage Tubes**

Cat No	Description	Packaging
4890MTX	Matrix Empty Latch Rack for 1.4 mL tubes	10 racks/cs
4893MTX	Matrix Empty Snap Rack for 1.4 mL tubes	10 racks/cs
4896MTX	Matrix Empty Latch Racks for 0.75 mL tubes	10 racks/cs
4898MTX	Matrix Empty Latch Racks for 500 µL tubes	10 racks/cs
4899MTX	Matrix Empty Latch Racks for 500 µL tubes w/ DuraSeals*	10 racks/cs
4901MTX	Matrix Empty Latch Rack fixture lid for 0.75 mL Matrix tubes, white	10/cs



## ► Thermo Scientific Matrix Blank and Alphanumeric Storage Tubes



**Matrix™ Blank and Alphanumeric storage tubes allow robust, secure, high-density storage of valuable samples.**

Samples can be identified using the alphanumeric code on the bottom of each tube. Compatible with the automation-friendly full line of seals and capping equipment, and provided in manual and automation friendly rack formats, these tubes are ideal for scaling up from microplate or deep well block sample storage or storing individual samples that do not require 2D tracking.

### details

#### Highest Quality

- Matrix storage tubes are manufactured from medical grade virgin polypropylene
- Tubes are 100% leak tested to ensure sample integrity and security
- Tubes are validated to be free of DNase, RNase, and endotoxins

#### Superior Storage Rack Design

- Unlike traditional storage tubes or blocks, Matrix blank and alphanumeric storage tubes are available in our specially-designed, stackable, microplate-footprint latch racks of 96 tubes for individual sample, access and removal
- The latch rack design enables multichannel pipette access and eliminates contamination risk with a lid that never touches the bench top when open
- The latch rack design is also compatible with automated equipment, as the lid can be lifted robotically for high-throughput applications

#### Clear Designations

- Matrix alphanumeric storage tubes are clearly marked with high contrast printing on the base of each tube, designating their appropriate well location within a rack, for easy identification
- Enhance ease of visual identification with colored SeptraSeal capping options

#### Capping Options

- Several sealing options are available, including the Matrix line of CapMats and CapStrips for sealing multiple tubes and the Matrix SeptraSeal capping systems for individual tube sealing, access and piercing
- Applied with the SuperSealer, sealing is secure and consistent every time

**Recommended for:** Individual sample retrieval; shipping samples; storing DNA, compounds, or any other samples.

**Compatible Products:** Capping systems, SeptraSeals, SuperSealer.



## Matrix™ Blank and Alphanumeric Storage Tubes

Description		0.75 mL Storage Tubes	1.4 mL Storage Tubes
Cat. No.		4271, 4272, 4273, 4274, 4896	4247, 4248, 4249, 4250, 4251, 4252, 4253, 4254, 4890
Figure 1: Tube Side View	Width (1A)	8.74 ± 0.08 [0.344 ± 0.003]	8.74 ± 0.08 [0.344 ± 0.003]
	Width (1B)	6.83 ± 0.03 [0.269 ± 0.001]	6.83 ± 0.05 [0.269 ± 0.002]
	Height	33.60 ± 0.13 [1.323 ± 0.005]	43.99 ± 0.08 [1.732 ± 0.003]
Figure 2: Rack Side View	Height (2A)	29.46 ± 0.13 [1.160 ± 0.005]	29.46 ± 0.13 [1.160 ± 0.005]
	Height (2B)	32.92 ± 0.08 [1.296 ± 0.003]	43.33 ± 0.08 [1.706 ± 0.003]
	Height (2C)	35.56 ± 0.25 [1.400 ± 0.010]	45.95 ± 0.20 [1.809 ± 0.008]
Figure 3: Rack Top View	Length	127.76 ± 0.13 [5.030 ± 0.005]	127.76 ± 0.13 [5.030 ± 0.005]
	Width	85.47 ± 0.13 [3.365 ± 0.005]	85.47 ± 0.13 [3.365 ± 0.005]
Figure 4: Stacked Rack View	Single Height (4A)	39.37 ± 0.25 [1.550 ± 0.100]	49.84 ± 0.25 [1.962 ± 0.100]
	Incremental Height (4B)	38.36 ± 0.25 [1.510 ± 0.100]	48.82 ± 0.25 [1.922 ± 0.100]
	Stacked Height (4C)	98.65 ± 0.51 [3.884 ± 0.200]	98.65 ± 0.51 [3.884 ± 0.200]

## Matrix Blank and Alphanumeric Storage Tubes

Cat No	Capacity, mL	Label	Sterile	Packaging
4170MTX	0.75	Blank	No	Bulk, 1000/case
4271MTX	0.75	Blank	No	10 Latch Racks of 96 tubes/case
4272MTX	0.75	Blank	Yes	10 Latch Racks of 96 tubes/case
4273MTX	0.75	Alphanumeric	No	10 Latch Racks of 96 tubes/case
4274MTX	0.75	Alphanumeric	Yes	10 Latch Racks of 96 tubes/case
4140MTX	1.4	Blank	No	Bulk, 1000/case
4147MTX	1.4	Alphanumeric	No	10 Snap Racks of 96 tubes/case
4148MTX	1.4	Alphanumeric	Yes	10 Snap Racks of 96 tubes/case
4245MTX	1.4	Blank	No	10 Snap Racks of 96 tubes/case
4246MTX	1.4	Blank	Yes	10 Snap Racks of 96 tubes/case
4247MTX	1.4	Blank	No	10 Latch Racks of 96 tubes/case
4248MTX	1.4	Blank	Yes	10 Latch Racks of 96 tubes/case
4249MTX	1.4	Blank	No	10 Refill carriers of 96 tubes/case
4250MTX	1.4	Blank	Yes	10 Refill carriers of 96 tubes/case
4251MTX	1.4	Alphanumeric	No	10 Latch Racks of 96 tubes/case
4252MTX	1.4	Alphanumeric	Yes	10 Latch Racks of 96 tubes/case
4253MTX	1.4	Alphanumeric	No	10 Refill carriers of 96 tubes/case
4254MTX	1.4	Alphanumeric	Yes	10 Refill carriers of 96 tubes/case

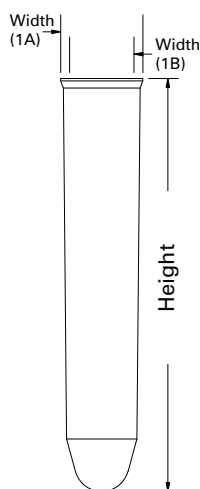


Figure 1

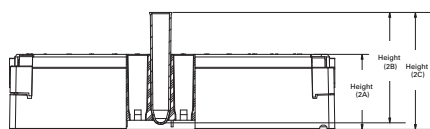


Figure 2

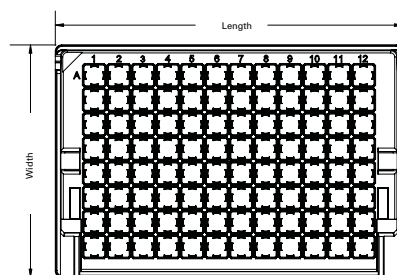


Figure 3

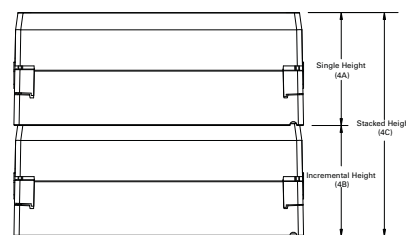


Figure 4



## ► Thermo Scientific Matrix SepraSeal and DuraSeal Capping Systems



*DuraSeal caps are pre-split and pierceable*



*SepraSeals work in tandem with Thermo Scientific SuperSealer*



*Many color options to organize your samples*

**Matrix™ SepraSeal and DuraSeal tube sealing solutions complement the innovative line of Thermo Scientific Matrix 2D and non-2D coded storage tubes.**

Available in a range of formats, colors, and sterility, there is a sealing option to meet a range of application and storage requirements.

### details

#### Enhanced Materials

- Matrix SepraSeal and DuraSeal capping systems are made of an advanced thermoplastic elastomer that offers excellent chemical resistance and low vapor transmission rates, minimizing evaporation and water uptake in DMSO-based samples
- Elastomer ensures sealing performance will not degrade, even after multiple cap piercings

#### Sample Access Options

- Designed for storage down to -80°C, Matrix SepraSeal mats are available in sterile, non-sterile, solid, or pre-split, in a range of colors for quick visual sample identification
- Solid seals can be removed for sample access with the Matrix SepraSeal cap removal tool, or can be pierced once
- For applications involving repetitive sample access, a pre-split Matrix SepraSeal can be pierced by automated liquid handling equipment, requiring very little pressure, while maintaining seal integrity with self sealing closure
- For applications requiring storage in vapor phase liquid nitrogen, permanently installed DuraSeals are an ultra robust SepraSeal option – can also be used for repetitive piercing procedures
- The Matrix DuraSeals Pre-Split V-Shaped design reliably and accurately guides automated liquid handling needles into the same location over multiple piercings. Self-sealing design maintains sample integrity and prevents loss during storage

#### Application Flexibility

- The Matrix SepraSeal tube sealing solution offer the flexibility of individual tube capping while also providing the ability to apply 96 caps at once
- Supplied in mats of 96 caps each, sealing is secure and consistent every time when applied with the Thermo Scientific SuperSealer
- After the SuperSealer applies the mat, simply pull up the backing sheet to reveal 96 individually sealed tubes – for applications where multiple piercings are required
- The Matrix DuraSeal capping system is available in bulk or pre-installed in a wide array of our storage tubes

Specifications	
Cap Material	Virgin Class VI Medical-grade Thermoplastic Elastomer and Colorants
Backing Material	Styrene Butadiene
Compatibility	Thermo Scientific Matrix and most other 7 mm open-top tubes
Autoclavable	Caps: Yes Backing: No
Cap Temp Range	From 121°C to -80°C storage. DuraSeals can be stored as low as -180°C.

**Matrix SeptraSeal and DuraSeal Capping Systems**

Cat. No.	Seal Color	Compatible with Tube Volumes	Pre-Split	No. Per Case
4463MTX	Natural	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4463BLU	Blue	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4463GRE	Green	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4463GRY	Gray	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4463PIN	Pink	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4463PUR	Purple	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4463RED	Red	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4463YEL	Yellow	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
<b>Matrix SeptraSeal, Sterile</b>				
4464MTX	Natural	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4464BLU	Blue	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4464GRE	Green	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4464GRY	Gray	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4464PIN	Pink	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4464PUR	Purple	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4464RED	Red	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
4464YEL	Yellow	0.5 mL; 0.75 mL, 1.4 mL		10 Mats of 96 / Case
<b>Matrix SeptraSeal, Pre-Split</b>				
4465MTX	Natural	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4465BLU	Blue	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4465GRE	Green	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4465GRY	Gray	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4465PIN	Pink	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4465PUR	Purple	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4465RED	Red	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4465YEL	Yellow	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
<b>Matrix SeptraSeal, Pre-Split, Sterile</b>				
4466MTX	Natural	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4466BLU	Blue	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4466GRE	Green	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4466GRY	Gray	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4466PIN	Pink	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4466PUR	Purple	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4466RED	Red	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
4466YEL	Yellow	0.5 mL; 0.75 mL, 1.4 mL	X	10 Mats of 96 / Case
<b>DuraSeal Caps, Bulk</b>				
4490MTX	Natural	0.5 mL; 0.75 mL, 1.4 mL		500 / Case
<b>Matrix SeptraSeal Cap Removal Tool</b>				
4469MTX				1 / Case



## ► Thermo Scientific ID Scribe Labware Identifier



Unit includes dust cover for sample protection



Supplied with easy-to-use software



Uses standard laboratory markers

**The ID Scribe Labware Identifier writes on tubes, vials and other laboratory materials to simply and legibly identify samples.**

Save time identifying laboratory samples with permanent, legible writing. Economically replace handwritten samples or enhance 2D barcoded tubes with human-readable identification.

### details

- **Legible, Repeatable Solution:** Whether storing for one day or retrieving samples years later, your sample identification will be legible throughout the life of the sample
- **Flexible Writing Range:** Imprints directly on curved and flat surfaces, and combined with the wide range of racks available, allows you to label nearly any type of labware
- **Time Saver:** Use pen colors for quick visual reference; each rack holds multiple pieces for fast, efficient labeling using Excel spreadsheets for data

**Ordering Information:** Racks are required for system operation and must be purchased separately.

**Includes:** ID Scribe unit, CD with software and electronic manual, 3 (EU, UK, US) country power cords, 5 pens (2 black, 1 red, 1 blue, 1 green), pen holder, printed manual

**Warranty:** 1 year in factory warranty; extended warranties available. Please contact Customer Service for details.

**Compliance:** RoHs.

**Certifications:** CE and CSA.

No label backing to dispose of means less waste in your laboratory.

Specifications	3200	3205
Dimensions, L x W x H, mm (in.)	387 x 457 x 229 (15.25 x 18 x 9)	381 x 1118 x 178 (15 x 44 x 7)
Weight, kg (lb.)	8 (18)	16 (36)
Power Supply, VAC, Hz, A	110-240, 50-60, 1.5	110-240, 50-60, 1.5
Speed	Varies by rack and labware type	Varies by rack and labware type
Capacity	1 rack of labware	4 racks of labware
Dust Cover/Lid Included	Yes	No
Racks Included	No	No
Computer Included	No	No
Software Included	Yes	Yes
Global Power Cords Included	Yes	Yes
Connection Method	Via supplied USB cable to PC or laptop	Via supplied USB cable to PC or laptop
Software Requirements	Windows™ XP, Vista™ or 7, Excel™ XP, 2003, 2007, 2010 running locally, one USB port	Windows XP,™ Vista or 7, Excel XP, 2003, 2007, 2010 running locally, one USB port

## ID Scribe Labware Identifier

Cat. No.	Dimensions, L x W x H, mm (in.)	Capacity per Rack	Weight, kg (lb.)
3200†	387 x 457 x 229 (15.25 x 18 x 9)	1	8 (18)
3205	381 x 1118 x 178 (15 x 44 x 7)	4	16 (36)

† Includes dust cover/lid

## ID Scribe Racks

Cat. No.	For Use With	Compatible Labware Dimensions, W/O.D. x L, mm (in.)	Columns	Rows	Total Rack Capacity	Writing Surface	Case of
3300-11	1-2 mL Nunc CryoTubes, including CryoBank	12 x 55 (0.472 x 2.165)	3	7	21	Side	1
3301	1-1.4 mL 96-Way Tubes, Side Writing	7.5 x 56.5 (0.295 x 2.224)	3	12	36	Side	1
3302	1.5-2 mL Microcentrifuge Tubes, Side Writing	10.2 x 43.7 (0.402 x 1.720)	4	5	20	Side	1
3303-11	1.5-2 mL Microcentrifuge Tubes, Top Writing	10 x 11.8 (0.394 x 0.465)	7	6	42	Top	1
3304	15 mL Centrifuge Tubes, Side Writing	15.7 x n/a (0.618 x n/a)	2	5	10	Side	1
3305-11	Micropackaging Vials and Closures, Side Writing	10 x 50 (0.394 x 1.969)	3	7	21	Side	1
3306-11	3.6-4.5 mL Nunc CryoTubes, Side Writing	11.7 x 100 (0.461 x 3.937)	2	6	12	Side	1
3311-11	1.2 mL Nalgene Cryogenic Tubes, Side Writing	11.3 x 40.5 (0.445 x 1.594)	4	8	32	Side	1
3312	2 mL Nalgene Cryogenic Tubes	11.5 x 54.3 (0.453 x 2.138)	3	8	24	Side	1
3313-11	2 mL HPLC Vials	11.4 x 42.8 (0.449 x 1.685)	4	6	24	Side	1
3350-11	.5 mL Cryobank Tubes	8.4 x 36.3 (0.331 x 1.429)	4	11	44	Side	1
3351	.5-.75 mL 96-Way Tubes	7.4 x 41.5 (0.291 x 1.634)	4	12	48	Side	1
3352	0.5 mL Microcentrifuge Tubes	7.3 x 34.3 (0.287 x 1.350)	5	6	30	Side	1
3353	0.5 mL Microcentrifuge Tubes	7 x 12 (0.276 x 0.472)	8	6	48	Top	1
3354	50 mL Centrifuge Tubes	27.6 x n/a (1.087 x n/a)	2	3	6	Side	1
3355-11†	1-2 mL Nunc CryoTubes With Inserts	11 x 11 (0.433 x 0.433)	2	8	16	Top	1
3356	0.2 mL Microcentrifuge Tubes	5.3 x 25.5 (0.209 x 1.004)	6	7	42	Side	1
3357	0.2 mL Microcentrifuge Tubes	5.6 x 6.7 (0.220 x 0.264)	12	8	96	Top	1
3358†	Micropackaging Vials and Closures	10 x 11.8 (0.394 x 0.465)	7	6	42	Top	1
3359	PCR Strips, Top Writing	5.5 x n/a (0.217 x n/a)	8	1	8	Top	1
3360	~25 x 75 mm Slides	77 x 27 (3.301 x 1.063)	5	1	5	Top	1
3361	1.0 mL Cryobank Tubes	8.4 x 50 (0.331 x 1.969)	3	11	33	Side	1
3362	1.0 mL Nalgene System 100 Cryogenic Tubes	10 x 54.3 (0.394 x 2.138)	3	8	24	Side	1
3363	1.5 mL Nalgene System 100 Cryogenic Tubes	10.2 x 54.4 (0.402 x 2.142)	3	8	24	Side	1
3364	0.5 in. Microplate	85 x 133 (3.346 x 5.236)	1	1	1	Top	1
3365	IVF Straws, Side writing	3 x n/a (0.118 x n/a)	1	12	12	Side	1
3366†	1.0-1.2 mL Nalgene and Nunc CryoTube Caps With Inserts	12.3 x 12.4 (0.484 x 0.488)	8	2	16	Top	1

† Requires cap inserts in place to write on



## ► Thermo Scientific Capit-AII and Capit-AII IS Screw Cap Tube Capper/Decapper



*Cap or decap an entire rack of tubes in about ten seconds*



*Easily integrated into automated systems*



*Caps all tubes in a rack to the optimal torque level*

**Capit-AII™ and Capit-AI IS instruments cap and decap 24-, 48-, and 96-format Matrix and Nunc™ ScrewTop tubes with precision and ease.**

Designed for benchtop or integrated use, the Capit-AII instruments cap tubes to the optimal torque to maintain sample integrity and provide a hands free method of capping and decapping tubes quickly and easily.

### details

#### Enhanced Productivity

- Increase throughput by capping and decapping an entire rack one at a time in approximately 10 seconds
- Automatically remove and replace caps on tubes of differing heights, even in the same rack, as well as tubes not properly seated in racks
- Completely replace manual capping and decapping methods
- Caps all tubes in a rack to the optimal torque level, maintaining sample integrity and preventing sample loss during storage

#### Superior Sample Protection

- Safety features ensure racks are loaded in the correct orientation and that caps are not cross-threaded or overtightened
- Drip tray prevents cross contamination of samples during addition and removal of tube racks
- Internal construction ensures debris is not introduced into uncapped tubes

#### Ease of Use

- The simple, four-button user interface enables laboratory personnel of any level to operate the instrument
- IS version is easily integrated into automated systems
- Easily maintained and able to process up to a million tubes before requiring preventative maintenance

Specifications		
	Capit AII	Capit AII IS
Speed	Approx. 10 seconds per rack	Approx. 15 seconds per rack
Operation	Hand operation via push buttons	Remotely via RS232; By computer via included drivers; Hand operation via push buttons
Power Supply, VAC, Hz	110-240, 50-60	110-240, 50-60
W x D x H, in. (mm)	12.9 x 14.2 x 22.0 (360 x 328 x 560)	27.6 x 13.4 x 22.0 (700 x 340 x 560)
Weight, lbs. (kg)	97 (45)	129 (58.5)

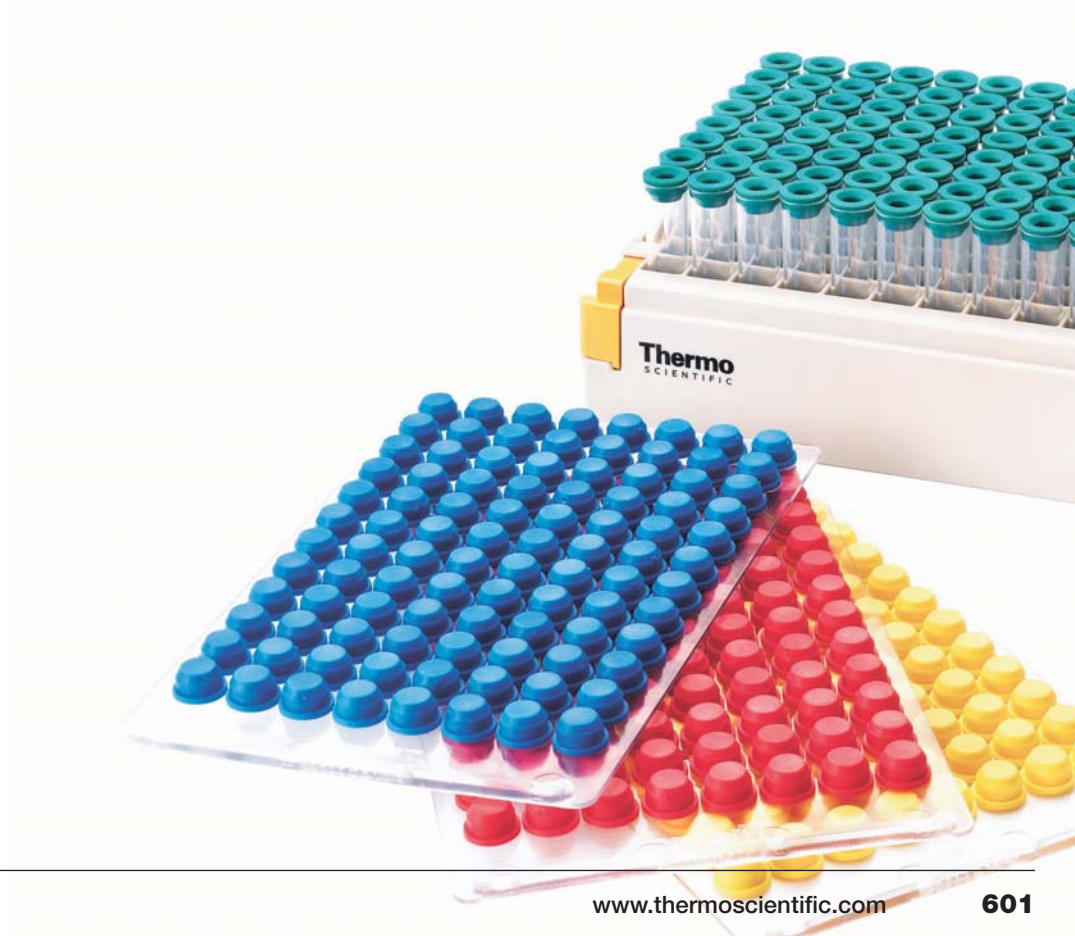


**Capit-All and Capit-All IS Screw Cap Tube Capper/Decapper**

Cat No	Description	Compatible Tubes	Channels
4111MAT	Capit-All Screw Top Tube Capper/ Decapper for 96 format Matrix tubes	Matrix ScrewTop 0.5 mL; 1.0 mL Tubes	96
4111MAT-IS	Automation Friendly Capit- All ScrewTop Tube Capper/Decapper for 96 format Matrix Tubes	Matrix ScrewTop 0.5 mL; 1.0 mL Tubes	96
4111NUN	Capit-All Screw Top tube Capper/ Decapper for 96 format Nunc tubes	Nunc Cryobank 0.5 mL; 1.0 mL Tubes	96
4111NUN-IS	Automation Friendly Capit-All Screw Top tube Capper/ Decapper for 96 format Nunc Tubes	Nunc Cryobank 0.5 mL; 1.0 mL Tubes	96
4114NUN	Capit-All Screw Top Tube Capper/ Decapper for 48 format Nunc Screw Top Tubes	Nunc Cryobank 2.0 mL; 5.0 mL Tubes	48
4114NUN-IS	Automation Friendly Capit-All Screw Top Tube Capper/ Decapper for 48 format Nunc Screw Top Tubes	Nunc Cryobank 2.0 mL; 5.0 mL Tubes	48
4112NUN	Capit-All Screw Top Tube Capper/ Decapper for 24 format Nunc Screw Top Tubes	Nunc Internally Threaded Cryotubes	24
4113NUN	Capit-All Screw Top Tube Capper/ Decapper for 24 format Nunc Screw Top Tubes	Nunc Externally Threaded Cryotubes	24
4113NAL	Capit-All Screw Top Tube Capper/ Decapper for 24 format Nalgene Screw Top Tubes	Nalgene Externally Threaded Cryotubes	24

**Capit-All Screw Cap Tube Capper/Decapper Accessories**

Cat No	Description
4090	ScrewTop Cap Tray Lifter for Capit-All (4111MAT) for use with 0.5 mL Matrix tubes
4091	ScrewTop Cap Tray Lifter for Capit-All (4111MAT) for use with 1.0 mL Matrix tubes
N12030	ScrewTop Cap Tray Lifter for Capit All (4111NUN) for use with 0.5 mL Nunc tubes
N12031	ScrewTop Cap Tray Lifter for Capit All (4111NUN) for use with 1.0 mL Nunc tubes





## ► Thermo Scientific 8-Channel Screw Cap Decapper



Decaps and caps tubes at the optimal torque for sealing

**Our 8-Channel Screw Cap Capper/ Decapper allows ergonomic manual processing of a full rack of Thermo Scientific Matrix™ or Thermo Scientific Nunc™ tubes in less than one minute.**

Designed to cap tubes to the optimal torque to maintain sample integrity and prevent sample loss during storage, the 8-channel Capper/Decapper is a practical addition to benchtop processing of ScrewTop storage tubes.

### details

- Improves processing throughput of manual procedures with automated column-wise decapping and capping in just four seconds
- Ensures reproducibility by capping all tubes to the optimal torque level specified for the tube
- Lightweight, ergonomic and easy-to-use design can be used by anyone in the laboratory
- Long battery life and quick recharge time means the capper/decapper is virtually always available for use
- Stand allows easy storage of removed caps during sample processing steps
- Use with ScrewTop cap trays for application of fresh caps after sample processing



Capper/decapper side view

Capper/decapper front view

Specifications	
Speed	4 sec. to cap/decap 8 tubes
Power Supply	12V rechargeable battery, Input 100 to 240V, 50/60Hz, output 12V, 1.0A
Battery Life	Minimum 20 racks, cap and decap
Recharge Time (Fully Discharged), min.	90
L x W x H, cm (in.)	25.1 x 9.5 x 5.0 (9.87 x 3.76 x 2.0)
Net Weight, kg (lbs.)	0.44 (0.97)

### 8-Channel Screw Cap Decapper

Cat No	Description	Compatible Tubes
4105MAT	8-Channel Handheld Screw Cap Capper/ Decapper with Stand for Matrix-style Tubes	Matrix ScrewTop 0.5 mL; 1.0 mL Tubes
4105NUN	8-Channel Handheld Screw Cap Capper/ Decapper with Stand for Nunc-style Tubes	Nunc Cryobank 0.5 mL; 1.0 mL; 2.0 mL; 5.0 mL Tubes
4106	Capper/Decapper Stand	
4109	Capper/Decapper spare power supply	



## ► Thermo Scientific VisionMate High Speed 2D Barcode Reader



The VisionMate High Speed 2D Barcode Reader rapidly reads and decodes 2D barcodes of individual tubes through fully populated tube racks. Compatible with the line of Thermo Scientific 2D barcoded products, the VisionMate High Speed Reader's less than one second read time can increase throughput of manual or integrated workflows.

Compact, user-friendly reader provides exceptional flexibility with data export formats, tube type readability and tube layout options.

### details

#### Speed and Versatility

- Intuitive software can be easily downloaded for manual use or remote control through TCP/IP connection.
- Scans a single 2D barcoded storage tube or entire tube rack in less than one second
- Robust optics and compact, integration-friendly design are ideal for high-throughput use

#### Enhanced Tube Readability

- Configured for all Thermo Scientific 2D barcoded tubes and user configurable for other 2D tube formats
- Integration of linear 1D barcode reader allows integration of individual tube and rack barcode data

#### Simple Operation

- Connect to your computer via a single USB port and, despite which way the tube rack is placed, the computer automatically adjusts orientation and correctly aligns codes with well positions
- Quickly and easily download software and upgrades from [www.thermoscientific.com](http://www.thermoscientific.com)
- Connects to PC via a single USB port for easy installation

#### Superior Sample Protection

- Operates down to -40°C, enabling barcode reading in cold rooms and low temperature liquid stores to preserve sample integrity
- Sealed unit prevents frost and condensation which allows reading frozen tubes at ambient temperatures

#### Data File Flexibility

- Easily integrated into LIMS, databases or tracking systems
- User-defined code types and lengths indicate incorrect codes and limit access by user profile

Specifications	
Speed	< 1 second/rack
Decoding Capacity	1 rack
Data Transfer Method	Data transfer to comma-delimited linear and columnar ASCII text files; ActiveX controls
D x W x H, in. (cm)	8 x 8.75 x 7.25 (20.5 x 22.5 x 18.5)
Weight, kg (lbs.)	2.27 (5)
Power Supply, VAC, Hz	115-240, 50-60
Supported Barcode	Any Thermo Scientific Matrix 2D Barcoded Storage Tube in 8 x 12 or 4 x 6 format as well as virtually any other 2D barcode in similar formats
Computer Requirements	Microsoft™ Windows™ controller PC

#### VisionMate High Speed 2D Barcode Reader

Cat. No.	Description
AB1850	VisionMate High Speed 2D Barcode Reader
AB1860	VisionMate High Speed Linear Barcode Reader Accessory



## ► Thermo Scientific VisionMate Wireless 2D Barcode Reader



**The VisionMate Wireless 2D Barcode Reader decodes both individual 2D barcodes and linear barcodes.**

Integrated Bluetooth technology allows wireless operation and barcode reading flexibility in the lab, cold room or in-field applications. Seamlessly transmit data to laptop, PC, or PDA device.

### details

- Hold a Matrix 2D Barcoded Storage Tube over the VisionMate Wireless' scanning window and the code is decoded and imported instantly into any application, including spreadsheets, databases and LIMS
- Easily scan and record linear (1D) barcodes into your applications
- Enables barcode reading in your cold room, in the field or across the laboratory via Bluetooth technology

### Effortless Operation

- The VisionMate's flat bottom profile allows hands-free scanning, yet at only 13.5 ounces (383 grams) the unit can be used by anyone decoding linear or 2D barcodes

Specifications	
W x D x H, in. (cm)	1.68 x 7.4 x 2.28 (18.8 x 4.3 x 5.8)
Weight, g (oz.)	383 (13.5)
Battery Run Time	8 hours of continuous run time
Charging Time	Approximately 6 hours
Battery Indicator Life	Green: 100-50% charged Amber: 50-20% charged
Charging Connection	Via supplied USB port connection
Computer Requirements	Microsoft™ Windows™ controller PC

### VisionMate Wireless 2D Barcode Reader

Cat. No.	Description
3122MTX	VisionMate Wireless 2D Barcode Reader



## ► Thermo Scientific VisionTracker Storage Tracking Database Software



**VisionTracker™ Storage Tracking Database Software provides an intuitive and secure database for the storage of your precious sample data and corresponding locations.**

Whether storing in linear barcoded cryotubes, 2D barcoded tubes, or other storage vessels, VisionTracker can help to easily organize and track your samples. VisionTracker is ideal for use with the VisionMate 2D reader portfolio for seamless integration of linear or 2D barcode data.

Specifications	
Maximum Sample Storage Capacity	16,000,000 tube samples*
Audit Trail	Tracks all sample data; date and time-stamped
Search Criteria	All fields searchable
User Levels	Administrator and User; password protected
Import File Formats	Excel and Open Office, locally-installed compatibility only
Operating System Compatibility	Microsoft® Windows – XP, Vista or Windows 7; Excel XP, 2003, 2007, 2010 running locally; one USB port

*\* Search time may increase with larger numbers of samples stored*

### VisionTracker Storage Tracking Database Software

Cat. No.	Description
3220	VisionTracker Storage Tracking Database Software



## ► Thermo Scientific VisionMate SR Single Rack 2D Barcode Reader



**The VisionMate™ SR 2D Barcode Reader decodes a full rack of barcoded storage tubes in less than ten seconds.**

This compact, user-friendly reader provides exceptional flexibility with data export formats, tube type readability, and tube layout options.

### details

- Control through versatile on-screen software or remotely through TCP/IP connection.
- Speed: scans a full tube rack in less than ten seconds
- Simple operation: simply follow the instructions during software installation and connect the reader to a computer via USB port
- Flexible: integrates easily with LIMS, existing databases or tracking systems
- Space-conscious: small footprint and compact profile save valuable benchtop space



Specifications	
Dimensions (W x D x H)	280 mm (11.0 in.) x 160 mm (6.3 in.) x 55 mm (2.2 in.)
Weight kg (lbs.)	0.8 (1.76)
Power Supply	110-240 V, 50-60 Hz
Speed	4 seconds/rack
Decoding Capacity	1 rack of any tube format, including 384
Supported Barcode Type	Any Thermo Scientific 2D Barcoded Storage tube, plus any other standard 2D Data Matrix-coded storage tube
Computer Requirements	1 GB RAM PC with Microsoft® Windows® 2000, Windows XP or higher (including Windows Vista®); 2 GHz Processor
Connection Method	Via supplied USB cable to internal USB2 port (external USB hubs not recommended)
Data Transfer Method	Microsoft Excel file; Text file (comma delimited, columnar file); COM Port; Virtual COM Port; X mL file; TCP/IP; ActiveX® and ODBC

### VisionMate SR Single Rack 2D Barcode Reader

Cat No	Description
3115	VisionMate SR 2D Barcode Reader





## ► Thermo Scientific VisionMate ST Single-Tube 2D Barcode Reader



**The VisionMate™ ST Barcode Reader is a compact single tube reader used for instant scanning of individual 2D barcoded tubes into any file or database application.**

Simple plug-and-play installation via automatically installed USB port allows simple and easy set up.

### details

- Simple to install and use
- Instant read time
- For individual sample retrieval
- Export flexibility: via comma-separated variable file, Microsoft® Excel™, X mL, COM port, ODBC or TCP socket

Specifications	
Dimensions (W x D x H)	111 mm (4.37 in.) x 87 mm (3.43 in.) x 70 mm (2.76 in.)
Weight kg (lbs.)	0.8 (1.76)
USB Operating Temperature	4°C to 30°C
Supported Barcode Type	Any Thermo Scientific 2D Barcoded Storage Tube as well as virtually any other tube with high contrast 2D codes
Computer Requirements	128 MB RAM PC with Intel® Pentium® 3 or Microsoft Windows 98 or higher (including Windows Vista®) and 1 USB port

### VisionMate ST Single-Tube 2D Barcode Reader

Cat No	Description
3125	VisionMate ST 2D Barcode Reader



## ► Labware Chemical Resistance Table

### Interpretation of Chemical Resistance

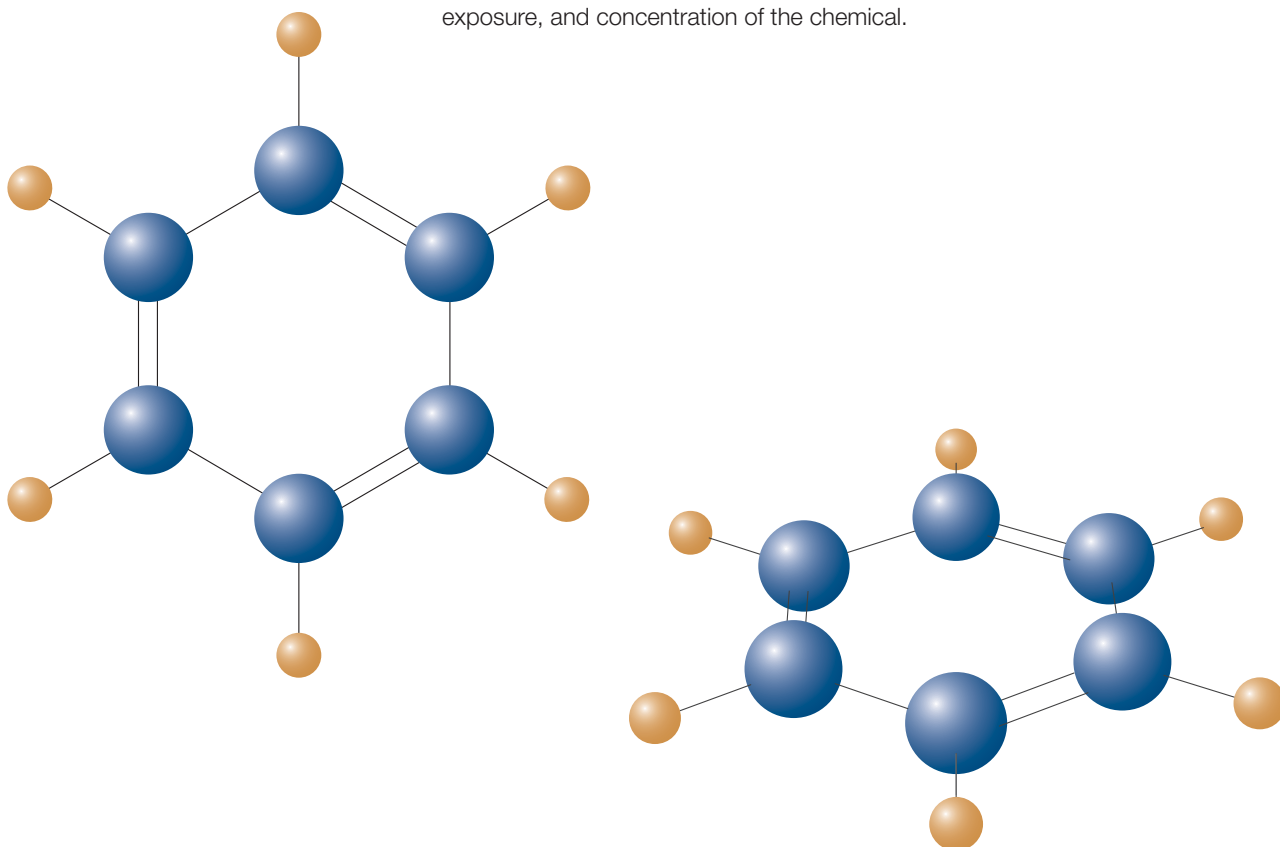
The Chemical Resistance Chart that follows is a general guide only. Because so many factors can affect the chemical resistance of a given product, you should test under your own conditions.

### Effects of Chemicals on Plastics

Chemicals can affect the strength, flexibility, surface appearance, color, dimensions or weight of plastics. The basic modes of interaction which cause these changes are: (1) chemical attack on the polymer chain, with resultant reduction in physical properties, including oxidation; reaction of functional groups in or on the chain; and depolymerization; (2) physical change, including absorption of solvents, resulting in softening and swelling of the plastic; permeation of solvent through the plastic; dissolution in a solvent; and (3) stress cracking from the interaction of a “stress cracking agent” with internal or external stresses.

Mixing and/or dilution of certain chemicals can be potentially dangerous.

The reactive combination of different chemicals or compounds of two or more classes may cause an undesirable chemical effect or result in an increased temperature, which can affect chemical resistance (as temperature increases, resistance to attack decreases). Other factors affecting chemical resistance include pressure and internal or external stresses (e.g. centrifugation), length of exposure, and concentration of the chemical.



## Environmental Stress Cracking

Environmental stress cracking is the failure of a plastic material in the presence of certain types of chemicals.

This failure is not a result of chemical attack. Simultaneous presence of three factors causes stress cracking: tensile stress, a stress cracking agent and the inherent susceptibility of the plastic to stress cracking.

Common stress cracking agents are detergents, surface active chemicals, lubricants, oils, ultra-pure water and plating additives such as brighteners and wetting agents. Relatively small concentrations of stress cracking agent may be sufficient to cause cracking.

Mixing and/or dilution of certain chemicals may result in reactions which produce heat, which can cause product failure.

Pre-test your specific usage and always follow correct lab safety procedures.

*Caution: Do not store strong oxidizing agents in plastic labware except that made of Teflon® FEP or PFA. Prolonged exposure can cause the material to become brittle and fail.*

*While prolonged storage may not be intended at time of filling, a forgotten container will fail in time and result in leakage of contents. Do not place any plastic labware into a flame.*

Resin Codes	
ECTFE	Halar® ECTFE (ethylene-chlorotrifluoroethylene copolymer)
ETFE	Tefzel ETFE (ethylene-tetrafluoroethylene)
FEP	Teflon® FEP (fluorinated ethylene propylene)
HDPE	high-density polyethylene
FLPE	fluorinated polyethylene
LDPE	low-density polyethylene
PC	polycarbonate
PEI	polyetherimide
PET	polyethylene terephthalate
PETG	polyethylene terephthalate copolymer
PFA	Teflon® PFA (polyfluoroalkoxy)
PMMA	polymethyl methacrylate (acrylic)
PMP	polymethylpentene
PP	polypropylene
PPCO	polypropylene copolymer
PS	polystyrene
PSF	polysulfone
RESMER	RESMER manufacturing technology
SAN	styrene acrylonitrile
TFE	Teflon® TFE (tetrafluoroethylene)
TMX	Thermanox
PMX	Permanox

*Teflon® is a registered trademark of DuPont used under license by Nalge Nunc International Corporation*

*Halar® is a registered trademark of Solvay Solexis*

*PPCO has replaced polyallomer (PA) in all products*



## ► Labware Chemical Resistance Table, continued

				Labware Olefin Polymers												Labware Fluoropolymers				
				LDPE		HDPE		PPP		PPCO		PMP		FLPE		FEP		TFE/PTFE		
Chemical, Concentration	CAS #	EC Number	M.W.	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	
1-(4-Chlorophenyl)ethanone, pure	99-91-2	202-800-7	154.60	E	E	E	E	G	F	E	E	E	E	E	E	E	E	E	E	
1,3-Butadiene, pure	106-99-0	203-450-8	54.09	N	N	F	N	N	N	N	N	N	N	G	F	E	E	E	E	
1,4-Dioxane, pure	123-91-1	204-661-8	88.11	G	F	G	G	F	N	G	F	F	N	E	E	E	E	E	E	
1:3 Mixture Of Nitric And Hydrochloric Acids, pure	8007-56-5		N/A	N	N	N	N	N	N	N	N	N	N	N	N	E	E	E	E	
1-Pentanol, pure	71-41-0	200-752-1	88.15	E	E	E	E	E	G	E	E	G	F	E	E	E	E	E	E	
1-Phenylethanone, pure	98-86-2	202-708-7	120.15	N	N	F	F	G	F	F	N	G	N	G	G	E	E	E	E	
1-Undecanol, pure	112-42-5	203-970-5	172.31	E	F	E	G	E	G	E	G	E	G	E	E	E	E	E	E	
2,2,4-Trimethylpentane, pure	540-84-1	208-759-1	114.23	F	N	F	N	F	N	F	N	F	N	G	F	E	E	E	E	
2,2'-Oxybispropane, pure	108-20-3	203-560-6	102.18	N	N	F	N	N	N	N	N	N	N	E	G	E	E	E	E	
2,4,6-Trinitrophenol, pure	88-89-1	201-865-9	229.11	N	N	N	N	N	N	N	N	E	E	N	N	E	E	E	E	
2-Hydroxy-1,2,3-Propanetricarboxylic Acid Tributyl Ester, pure	77-94-1	201-071-2	360.45	G	F	E	G	G	F	G	F	G	F	E	E	E	E	E	E	
2-Hydroxybenzaldehyde, pure	90-02-8	201-961-0	122.12	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E	
2-Isopropoxypropane, pure	108-20-3	203-560-6	102.18	N	N	F	N	N	N	N	N	N	N	E	G	E	E	E	E	
2-Methoxyethanol, pure	109-86-4	203-713-7	76.10	E	G	E	E	E	G	E	E	E	E	E	E	E	E	E	E	
2-Methoxyethyl Oleate, pure	111-10-4	203-834-5	340.54	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E	
2-Propanol, pure	67-63-0	200-661-7	60.10	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
2-Propanone, pure	67-64-1	200-662-2	58.08	G	N	N	N	F	N	N	N	E	E	F	F	E	E	E	E	
2-Propenenitrile, pure	107-13-1	203-466-5	53.06	E	E	E	E	F	N	F	N	F	N	E	E	E	E	E	E	
3-Phenyl-2-propenal, pure	104-55-2	203-213-9	132.18	N	N	G	N	N	N	N	N	N	N	G	G	F	F	G	G	
4'-Chloroacetophenone, pure	99-91-2	202-800-7	154.60	E	E	E	E	G	F	E	E	E	E	E	E	E	E	E	E	
Acetaldehyde, pure	75-07-0	200-836-8	44.05	G	N	G	F	G	N	G	N	G	N	E	G	E	E	E	E	
Acetic Acid Benzyl Ester, pure	140-11-4	205-399-7	150.18	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E	
Acetic Acid Phenylmethyl Ester, pure	140-11-4	205-399-7	150.18	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E	
Acetic Anhydride, pure	108-24-7	203-564-8	102.09	N	N	F	F	G	F	G	F	E	G	F	F	E	E	E	E	
Acetone, pure	67-64-1	200-662-2	58.08	G	N	F	N	F	N	N	N	E	E	E	G	E	E	E	E	
Acetonitrile, pure	75-05-8	200-835-2	41.05	E	E	E	E	E	G	F	N	F	N	E	E	E	E	E	E	
Acetophenone, pure	98-86-2	202-708-7	120.15	N	N	F	F	G	F	F	N	G	N	G	G	E	E	E	E	
Acrylonitrile, pure	107-13-1	203-466-5	53.06	E	E	E	E	F	N	F	N	F	N	E	E	E	E	E	E	
Adipic Acid, pure	124-04-9	204-673-3	146.14	E	G	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Alanine, pure	56-41-7	200-273-8	89.09	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Allyl Alcohol, pure	107-18-6	203-470-7	58.08	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E	
Aluminum Chloride, pure	7446-70-0	231-208-1	133.34	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Aluminum Hydrate, pure	21645-51-2	244-492-7	78.00	E	G	E	E	E	G	E	E	E	G	E	E	E	E	E	E	
Aluminum Hydroxide, pure	21645-51-2	244-492-7	78.00	E	G	E	E	E	G	E	E	E	G	E	E	E	E	E	E	
Aluminum Salts, pure	N/A		N/A	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Aluminum Trihydrate, pure	21645-51-2	244-492-7	78.00	E	G	E	E	E	G	E	E	E	G	E	E	E	E	E	E	
Amino Acids, pure	N/A		N/A	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Ammonia, pure	7664-41-7	231-635-3	17.03	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	
Ammonium Chloride, pure	12125-02-9	235-186-4	53.49	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	

**E** No damage after 30 days of constant exposure.

**G** Little or no damage after 30 days of constant exposure.

**F** Some effect after 7 days of constant exposure.

**N** Immediate damage may occur. Not recommended for continuous use.

	Labware Fluoropolymers, continued						Other Labware Polymers														Specialty Materials							
	PFA		Halar® ECTFE		Tefzel® ETFE		PETG		PC		PSF		PS		PMMA		SAN		PEI		RESMER™		PMX		TMX		PET	
	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
	E	E	E	E	E	E	-	-	G	N	G	N	N	N	N	N	-	-	-	-	F	N	E	E	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	G	F	N	N	-	-	-	-
	E	E	E	F	E	G	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	E	F	E	N
	E	E	E	G	E	G	N	N	N	N	N	N	N	N	N	N	G	N	N	N	N	N	N	N	N	N	N	N
	E	E	E	E	E	E	-	-	G	F	G	F	E	G	N	N	E	N	E	E	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	G	N	-	-	-	-
	E	E	E	G	E	G	-	-	G	F	G	F	G	G	-	-	E	E	-	-	E	E	E	G	-	-	-	-
	E	E	E	G	E	E	-	-	N	N	G	F	G	F	-	-	-	-	-	-	G	F	F	N	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	-	-	-	-	-	-	G	F	-	-	-	-
	E	E	G	F	G	F	-	-	N	N	N	N	G	F	-	-	E	E	-	-	G	F	E	E	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	F	N	N	N	-	-	-	-	-	-	-	-	G	F	-	-	-	-
	E	E	E	N	E	G	-	-	G	F	G	F	N	N	-	-	N	N	-	-	F	N	E	G	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	-	-	-	-	-	-	G	F	-	-	-	-
	E	E	E	G	E	E	F	N	N	N	N	N	N	N	N	N	N	N	-	-	-	-	E	E	G	-	G	-
	E	E	E	E	E	E	G	-	F	N	F	N	N	N	F	N	-	-	-	-	-	-	E	G	-	-	-	-
	E	E	E	E	E	E	F	N	G	F	E	G	E	G	N	N	E	F	E	E	E	E	E	E	E	F	E	N
	E	E	E	G	G	N	N	N	N	N	F	N	N	N	N	N	N	N	F	N	F	N	E	E	F	N	F	N
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	-	-	-	-	F	N	F	N	E	-	E	-
	G	G	E	G	E	G	-	-	G	F	G	F	N	N	N	N	N	N	E	E	E	E	N	N	E	N	E	N
	E	E	E	E	E	E	-	-	G	N	G	N	N	N	N	N	-	-	-	-	F	N	E	E	-	-	-	-
	E	E	G	F	E	G	-	-	N	N	N	N	N	N	N	N	N	N	N	N	G	G	G	N	-	-	-	-
	E	E	E	G	E	G	N	N	F	N	N	N	N	N	N	N	N	N	-	-	F	N	E	G	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	N	N	N	N	E	G	-	-	-	-
	E	E	E	E	E	E	N	N	F	N	N	N	N	N	N	N	N	N	-	-	F	N	E	G	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	N	N	N	N	E	G	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	G	N	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	-	-	-	-	F	N	F	N	E	-	E	-
	E	E	E	E	E	E	-	-	E	E	E	E	E	E	G	F	E	E	-	-	E	E	E	E	-	-	-	-
	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	E	E	E	E	E	G	-	-	G	G	G	G	G	F	N	N	N	N	-	-	E	E	E	G	E	N	E	N
	E	E	E	E	E	E	E	G	E	G	E	E	E	E	E	E	E	G	-	-	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	E	G	F	N	G	G	G	G	E	E	G	G	-	-	E	E	E	G	E	E	E	E
	E	E	E	E	E	E	E	G	G	G	G	G	E	G	G	F	E	G	-	-	E	E	E	E	E	G	E	G
	E	E	E	E	E	E	E	G	F	N	G	G	G	G	E	E	G	G	-	-	E	E	E	G	E	E	E	E
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	E	E	E	E	E	G	-	-	N	N	G	F	E	G	N	N	E	G	G	N	E	G	E	E	N	N	N	N
	E	E	E	E	E	E	E	G	E	G	E	E	E	E	E	-	E	E	E	E	E	E	E	E	E	E	E	E



## ► Labware Chemical Resistance Table, continued

				Labware Olefin Polymers														Labware Fluoropolymers			
				LDPE		HDPE		PPP		PPCO		PMP		FLPE		FEP		TFE/PTFE			
Chemical, Concentration	CAS #	EC Number	M.W.	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50		
Ammonium Glycolate, pure	999999-93-6		93.08	G	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E		
Ammonium Oxalate, pure	1113-38-8	214-202-3	124.10	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E		
Ammonium Salts, pure	N/A		N/A	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
Amyl Alcohol, pure	71-41-0	200-752-1	88.15	E	E	E	E	E	G	E	E	G	F	E	E	E	E	E	E		
Amyl Chloride, pure	543-59-9	208-846-4	106.60	N	N	F	N	N	N	N	N	F	F	G	F	E	E	E	E		
Aniline, pure	62-53-3	200-539-3	93.13	E	G	G	F	E	G	G	F	G	F	G	F	E	E	E	E		
Aqua Regia, pure	8007-56-5		N/A	N	N	N	N	N	N	N	N	N	N	N	N	E	E	E	E		
Arsenic Acid, pure	7778-39-4	231-901-9	141.94	G	F	E	E	E	E	E	G	E	E	E	E	E	E	E	E		
Benzaldehyde, pure	100-52-7	202-860-4	106.12	E	G	G	N	E	G	E	G	E	G	E	F	E	E	E	E		
Benzenamine, pure	62-53-3	200-539-3	93.13	E	G	G	F	E	G	G	F	G	F	G	F	E	E	E	E		
Benzene, pure	71-43-2	200-753-7	78.11	N	N	N	N	N	N	N	N	N	N	F	F	E	E	E	E		
Benzol, pure	71-43-2	200-753-7	78.11	N	N	N	N	N	N	N	N	N	N	F	F	E	E	E	E		
Benzyl Acetate, pure	140-11-4	205-399-7	150.18	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E		
Benzyl Alcohol, pure	100-51-6	202-859-9	108.14	N	N	F	N	G	F	N	N	-	-	E	E	E	E	E	E		
Boric Acid, pure	10043-35-3	233-139-2	61.83	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
Bromine, pure	7726-95-6	231-778-1	79.90	N	N	F	N	N	N	N	N	N	N	F	N	E	E	E	E		
Bromoform, pure	75-25-2	200-854-6	252.73	N	N	N	N	N	N	N	N	N	N	F	F	E	E	E	E		
Butadiene, pure	106-99-0	203-450-8	54.09	N	N	F	N	N	N	N	N	N	N	G	F	E	E	E	E		
Butyl Acetate, pure	123-86-4	204-658-1	116.16	G	F	G	F	F	N	G	F	F	F	E	G	E	E	E	E		
Butyl Chloride, pure	109-69-3	203-696-6	92.57	N	N	N	N	N	N	N	N	F	N	F	F	E	E	E	E		
Butyl Citrate, pure	77-94-1	201-071-2	360.45	G	F	E	G	G	F	G	F	G	F	E	E	E	E	E	E		
Butyric Acid, pure	107-92-6	203-532-3	88.11	N	N	G	G	N	N	N	N	N	N	F	N	E	E	E	E		
Calcium Chloride, pure	10043-52-4	233-140-8	110.98	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
Calcium Hypochlorite, Saturated	7778-54-3	231-908-7	142.98	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E		
Carbazole, pure	86-74-8	201-696-0	167.21	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
Carbon Disulfide, pure	75-15-0	200-843-6	76.14	N	N	N	N	F	N	N	N	N	N	N	N	E	E	E	E		
Carbon Tetrachloride, pure	56-23-5	200-262-8	153.82	F	N	G	F	G	F	N	N	N	N	E	G	E	E	E	E		
Cedarwood Oil, pure	8000-27-9		N/A	N	N	F	N	N	N	N	N	N	N	E	G	E	E	E	E		
Cellosolve® Acetate, pure	111-15-9	203-839-2	132.16	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E		
Chlorobenzene, pure	108-90-7	203-628-5	112.56	N	N	N	N	N	N	N	N	N	N	F	F	E	E	E	E		
Chloroform, pure	67-66-3	200-663-8	119.38	F	N	F	N	N	N	N	N	N	N	G	G	E	E	E	E		
Cinnamaldehyde, pure	104-55-2	203-213-9	132.16	N	N	F	N	N	N	N	N	N	N	E	F	E	E	E	E		
Cinnamic Aldehyde, pure	104-55-2	203-213-9	132.16	N	N	F	N	N	N	N	N	N	N	E	F	E	E	E	E		
Cinnamon Oil, pure	8015-91-6		N/A	N	N	N	N	N	N	G	F	N	N	E	G	E	E	E	E		
Copper Sulfate, pure	7758-98-7	231-847-6	249.69	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
Cresol, pure	1319-77-3	215-293-2	108.14	N	N	F	N	G	F	G	F	N	N	G	G	E	E	E	E		
Cyanoethylene, pure	107-13-1	203-466-5	53.06	E	E	E	E	F	N	F	N	F	N	E	E	E	E	E	E		
Cyclohexane, pure	110-82-7	203-806-2	84.16	F	N	F	N	G	N	G	F	N	N	E	G	E	E	E	E		
Cyclohexanone, pure	108-94-1	203-631-1	98.14	N	N	F	N	F	N	F	N	G	F	G	F	E	E	E	E		
Cyclopentane, pure	287-92-3	206-016-6	70.13	N	N	F	N	F	N	F	N	F	N	E	G	E	E	E	E		
Decahydronaphthalene, pure	91-17-8	202-046-9	138.25	G	F	E	G	N	N	G	F	F	N	E	E	E	E	E	E		

**E** No damage after 30 days of constant exposure.

**G** Little or no damage after 30 days of constant exposure.

**F** Some effect after 7 days of constant exposure.

**N** Immediate damage may occur. Not recommended for continuous use.



	Labware Fluoropolymers, continued						Other Labware Polymers																Specialty Materials					
	PFA		Halar® ECTFE		Tefzel® ETFE		PETG		PC		PSF		PS		PMMA		SAN		PEI		RESMER™		PMX		TMX		PET	
	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
	E	E	E	E	E	E	E	G	G	F	G	G	E	E	-	-	E	E	-	-	E	E	E	G	E	E	E	E
	E	E	E	E	E	E	-	-	E	E	E	E	E	E	F	N	E	E	-	-	E	E	E	G	-	-	-	-
	E	E	E	E	E	E	F	F	G	G	G	G	G	G	-	-	E	G	-	-	E	E	E	E	G	F	G	F
	E	E	E	E	E	E	-	-	G	F	G	F	E	G	N	N	E	N	E	E	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	F	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	N	N	E	E	F	N	G	F	E	-	G	-
	E	E	E	G	E	G	N	N	N	N	N	N	N	N	N	N	G	N	N	N	N	N	N	N	N	N	N	N
	E	E	E	E	E	E	-	-	E	E	E	E	E	E	N	N	-	-	-	-	E	E	E	E	-	-	-	-
	E	E	E	F	E	G	-	-	N	N	F	N	N	N	N	N	N	N	F	N	F	N	E	G	E	-	E	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	N	N	E	E	F	N	G	F	E	-	G	-
	E	E	E	G	E	G	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	F	F	G	N	G	N
	E	E	E	G	E	G	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	F	F	G	N	G	N
	E	E	E	G	E	E	N	N	F	N	N	N	N	N	N	N	N	N	-	-	F	N	E	G	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	G	N	-	-	F	N	N	N	E	F	G	N
	E	E	E	E	E	E	N	N	E	E	E	E	E	E	-	-	E	E	-	-	E	E	E	E	-	-	-	-
	E	E	E	G	E	E	N	N	F	N	F	N	N	N	F	N	N	N	G	G	N	N	N	N	N	N	N	N
	E	E	G	F	E	G	-	-	N	N	N	N	N	N	N	N	N	N	N	N	F	N	N	N	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	G	F	N	N	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	N	N	G	N	-	-	G	F	G	N	G	N
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	F	N	N	N	-	-	-	-	-	-	-	-	G	F	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	G	G	N	N	N	N	N	N	-	-	N	N	N	N	-	-	-	-
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	G	E	E	-	-	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	F	N	F	N	E	E	E	G	E	G	E	E	E	G	E	G	E	G	N	N	N	N
	E	E	E	E	E	E	-	-	N	N	N	N	E	E	-	-	E	E	-	-	E	E	E	E	-	-	-	-
	E	E	E	F	E	G	-	-	N	N	N	N	N	N	N	N	N	N	-	-	-	-	N	N	E	-	E	-
	E	E	E	E	E	E	N	N	N	N	N	N	N	N	N	N	F	N	E	-	F	N	N	N	N	N	N	N
	E	E	E	G	E	G	N	N	G	F	G	F	N	N	F	N	N	N	E	E	E	E	N	N	E	N	E	N
	E	E	E	E	E	G	-	-	F	N	F	N	N	N	F	N	N	N	-	-	-	-	E	G	-	-	-	-
	E	E	G	F	E	G	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	G	N	G	N
	E	E	G	F	E	G	N	N	N	N	N	N	N	N	N	N	N	N	N	N	F	N	N	N	N	N	N	N
	E	E	E	G	E	G	-	-	G	F	G	F	N	N	N	N	N	N	E	E	E	E	N	N	E	N	E	N
	E	E	E	G	E	G	-	-	G	F	G	F	N	N	N	N	N	N	E	E	E	E	N	N	E	N	E	N
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E
	E	E	E	G	E	E	-	-	N	N	N	N	F	N	N	N	N	N	-	-	F	N	N	N	E	N	E	N
	E	E	E	G	E	E	G	N	E	F	E	F	N	N	G	N	F	N	E	E	G	F	N	N	E	G	E	G
	E	E	E	E	E	E	N	N	N	N	N	N	N	N	N	N	N	N	-	-	F	N	G	F	E	F	E	F
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	G	N	-	-	-	-	G	F	F	N	-	-	-	-
	E	E	E	E	E	E	-	-	E	N	E	N	N	N	N	N	E	E	-	-	F	N	F	N	-	-	-	-



## ► Labware Chemical Resistance Table, continued

				Labware Olefin Polymers												Labware Fluoropolymers				
				LDPE		HDPE		PPP		PPCO		PMP		FLPE		FEP		TFE/PTFE		
Chemical, Concentration	CAS #	EC Number	M.W.	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	
Decalin, pure	91-17-8	202-046-9	138.25	G	F	E	G	N	N	G	F	F	N	E	E	E	E	E	E	
Diacetone Alcohol, pure	123-42-2	204-626-7	116.16	F	N	E	E	E	F	E	F	E	E	E	E	E	E	E	E	
Diacetone, pure	108-10-1	203-550-1	100.16	G	F	N	N	G	F	G	F	F	F	F	F	E	E	E	E	
Dibutyl Phthalate, pure	84-74-2	201-557-4	278.34	F	N	F	N	F	N	-	-	G	G	E	G	E	E	E	E	
Diethyl Benzene, pure	25340-17-4	246-874-9	134.22	N	N	F	N	N	N	N	N	N	N	G	F	E	E	E	E	
Diethyl Ether, pure	60-29-7	200-467-2	74.12	N	N	F	N	N	N	N	N	N	N	G	F	E	E	E	E	
Diethyl Ketone, pure	96-22-0	202-490-3	86.13	G	F	N	N	G	G	G	G	G	F	F	F	E	E	E	E	
Diethyl Malonate, pure	105-53-3	203-305-9	160.17	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E	
Diethylamine, pure	109-89-7	203-716-3	73.14	N	N	F	N	G	N	G	N	F	F	N	N	E	E	E	E	
Diethylene Dioxide, pure	123-91-1	204-661-8	88.11	G	F	G	G	F	N	G	F	F	N	E	E	E	E	E	E	
Diethylene Glycol Monoethyl Ether, pure	111-90-0	203-919-7	134.18	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Diethylene Glycol, pure	111-46-6	203-872-2	106.12	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Diisopropyl Ether, pure	108-20-3	203-560-6	102.18	N	N	F	N	N	N	N	N	N	N	E	G	E	E	E	E	
Dimethyl Acetamide, pure	127-19-5	204-826-4	87.12	F	N	E	E	E	E	E	E	G	F	G	G	E	E	E	E	
Dimethyl Formamide, pure	68-12-2	200-679-5	73.09	E	E	E	E	E	E	E	E	E	E	G	G	E	E	E	E	
Dimethyl Ketone, pure	67-64-1	200-662-2	58.08	G	N	N	N	F	N	N	N	E	E	F	F	E	E	E	E	
Dimethylsulfoxide, pure	67-68-5	200-664-3	78.14	N	N	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Dioxane, pure	123-91-1	204-661-8	88.11	G	F	G	G	F	N	G	F	F	N	E	E	E	E	E	E	
DIPE, pure	108-20-3	203-560-6	102.18	N	N	F	N	N	N	N	N	N	N	E	G	E	E	E	E	
Dipropylene Glycol, pure	25265-71-8	246-770-3	134.17	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
DMSO, pure	67-68-5	200-664-3	78.14	N	N	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Ether, pure	60-29-7	200-467-2	74.12	N	N	F	N	N	N	N	N	F	N	G	F	E	E	E	E	
Ethyl Acetate, pure	141-78-6	205-500-4	88.11	E	E	E	E	E	G	G	F	E	G	E	E	E	E	E	E	
Ethyl Alcohol, pure	64-17-5	200-578-6	46.07	E	G	E	E	E	E	E	E	E	G	E	E	E	E	E	E	
Ethyl Benzene, pure	100-41-4	202-849-4	106.17	F	N	G	F	N	N	F	N	N	N	E	G	E	E	E	E	
Ethyl Benzoate, pure	93-89-0	202-284-3	150.18	F	F	G	G	G	F	G	F	G	F	E	E	E	E	E	E	
Ethyl Butyrate, pure	105-54-4	203-306-4	11616	G	N	G	F	G	N	G	N	F	N	E	G	E	E	E	E	
Ethyl Chloride, pure	75-00-3	200-830-5	64.15	F	N	N	N	F	N	F	N	F	N	F	F	E	E	E	E	
Ethyl Cyanoacetate, pure	105-56-6	203-309-0	113.12	G	N	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Ethyl Lactate, pure	97-64-3	202-598-0	118.13	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Ethylene Chloride, pure	107-06-2	203-458-1	98.96	N	N	N	N	N	N	N	N	N	N	F	F	E	E	E	E	
Ethylene Glycol Monomethyl Ether, pure	109-86-4	203-713-7	76.09	E	G	E	E	E	G	E	E	E	E	E	E	E	E	E	E	
Ethylene Glycol, pure	107-21-1	203-473-3	62.07	E	E	E	G	E	E	E	E	E	E	E	E	E	E	E	E	
Ethylene Oxide, pure	75-21-8	200-849-9	44.05	F	F	G	F	F	N	F	F	F	N	E	G	E	E	E	E	
EtO, pure	75-21-8	200-849-9	44.05	F	F	G	F	F	N	F	F	F	N	E	G	E	E	E	E	
Fatty Acids, Saturated, pure	N/A		N/A	G	F	E	E	E	G	E	G	E	G	E	E	E	E	E	E	
Fatty Acids, Unsaturated, pure	N/A		N/A	G	F	E	E	E	G	E	G	E	G	E	E	E	E	E	E	
Fluorides, pure	N/A		N/A	E	E	E	E	E	E	E	E	E	E	G	G	E	E	E	E	
Formic Acid, pure	64-18-6	200-579-1	46.03	E	G	E	E	E	G	E	G	E	F	E	E	E	E	E	E	

**E** No damage after 30 days of constant exposure.

**G** Little or no damage after 30 days of constant exposure.

**F** Some effect after 7 days of constant exposure.

**N** Immediate damage may occur. Not recommended for continuous use.

	Labware Fluoropolymers, continued						Other Labware Polymers																Specialty Materials					
	PFA		Halar® ECTFE		Tefzel® ETFE		PETG		PC		PSF		PS		PMMA		SAN		PEI		RESMER™		PMX		TMX		PET	
	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
	E	E	E	E	E	E	-	-	E	N	E	N	N	N	N	N	E	E	-	-	F	N	F	N	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	G	F	N	N	N	N	-	-	E	G	E	E	G	F	G	F
	E	E	E	G	E	E	N	N	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	F	E	F	G	F
	E	E	G	N	E	G	-	-	G	N	G	N	N	N	N	N	N	N	G	F	F	N	G	G	F	N	F	N
	E	E	E	G	E	E	-	-	N	N	N	N	N	N	N	N	-	-	-	-	F	N	N	N	-	-	-	-
	E	E	E	G	E	G	E	-	N	N	N	N	N	N	N	N	N	N	E	-	-	-	N	N	E	N	E	N
	E	E	G	F	G	F	-	-	N	N	N	N	N	N	N	N	N	N	-	-	N	N	G	F	E	-	E	-
	E	E	E	E	E	E	-	-	F	N	F	F	N	N	-	-	N	N	-	-	-	-	E	G	-	-	-	-
	E	E	E	N	E	G	-	-	N	N	G	F	G	G	-	-	-	-	E	-	E	G	F	F	-	-	-	-
	E	E	E	F	E	F	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	E	F	E	N
	E	E	E	E	E	E	-	-	F	N	G	F	N	N	N	N	-	-	-	-	G	F	E	E	-	-	-	-
	E	E	E	E	E	E	-	-	G	F	G	G	E	G	N	N	E	E	E	E	E	E	E	E	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	-	-	-	-	-	-	G	F	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	-	-	-	-	E	-	-	-	G	F	E	N	G	N
	E	E	G	G	E	E	N	N	N	N	N	N	N	N	N	N	N	N	E	N	-	-	E	E	E	F	E	F
	E	E	E	G	G	N	N	N	N	N	F	N	N	N	N	N	N	N	F	N	F	N	E	E	F	N	F	N
	E	E	E	G	E	G	N	N	N	N	N	N	N	N	N	N	-	-	-	-	E	E	E	E	E	N	E	N
	E	E	E	F	E	F	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	E	F	E	N
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	-	-	-	-	-	-	G	F	-	-	-	-
	E	E	E	E	E	E	-	-	G	F	G	G	E	E	E	-	E	E	E	E	E	E	E	E	-	-	-	-
	E	E	E	G	E	G	N	N	N	N	N	N	E	G	N	N	-	-	-	-	E	E	E	E	E	N	E	N
	E	E	E	G	E	G	E	-	N	N	N	N	N	N	N	N	N	N	E	-	-	-	F	N	E	N	E	N
	E	E	E	E	E	G	N	N	N	N	N	N	N	N	N	N	N	N	G	N	-	-	E	G	E	F	E	F
	E	E	E	E	E	E	F	N	G	F	E	G	G	F	N	N	N	N	E	G	E	E	E	G	E	G	E	G
	E	E	G	F	G	F	E	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	N	N	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	-	-	N	N	-	-	F	N	G	F	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	N	N	-	-	-	-	F	N	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	-	-	-	-
	E	E	E	E	E	E	-	-	F	N	F	F	G	N	-	-	N	N	-	-	-	-	E	E	-	-	-	-
	E	E	E	E	E	E	-	-	F	N	F	F	N	N	-	-	N	N	-	-	-	-	E	E	-	-	-	-
	E	E	E	N	E	F	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	N	N	N	N	N	N
	E	E	E	G	E	E	F	N	N	N	F	F	N	N	N	N	N	N	-	-	G	F	E	E	G	-	G	-
	E	E	E	E	E	E	E	-	E	G	E	E	E	E	G	F	E	E	E	G	E	E	E	E	E	F	E	F
	E	E	E	E	E	G	G	F	F	N	F	N	F	N	F	N	N	N	-	-	F	N	F	N	F	N	F	N
	E	E	E	E	E	E	G	F	F	N	F	N	N	N	F	N	N	N	-	-	F	N	F	N	G	F	G	F
	E	E	E	G	E	E	G	F	G	F	G	F	E	G	E	G	-	-	E	E	E	E	E	G	G	G	F	F
	E	E	E	G	E	E	G	F	G	F	G	F	G	F	E	F	-	-	E	E	E	E	E	G	-	-	-	-
	E	E	E	E	E	E	E	G	E	E	E	E	G	G	G	F	-	-	-	-	E	E	E	E	E	G	E	G
	E	E	E	E	E	E	-	-	F	N	G	F	G	F	N	N	N	N	G	F	E	G	E	F	G	N	F	N



## ► Labware Chemical Resistance Table, continued

Chemical, Concentration	CAS #	EC Number	M.W.	Labware Olefin Polymers												Labware Fluoropolymers			
				LDPE		HDPE		PPP		PPCO		PMP		FLPE		FEP		TFE/PTFE	
				20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
Freon TF, pure	76-13-1	200-936-1	187.38	E	G	E	G	E	G	E	G	F	N	E	E	E	E	E	E
Fuel Oil No. 1, pure	8008-20-6	232-366-4	N/A	F	N	G	F	E	F	E	G	G	F	E	G	E	E	E	E
Gasoline, pure	8006-61-9	232-349-1	N/A	N	N	G	G	F	N	G	F	F	N	E	G	E	E	E	E
Glutaraldehyde Disinfectant, pure	N/A		N/A	E	G	E	E	E	E	E	E	F	F	E	E	E	E	E	E
Glutaraldehyde, pure	111-30-8	203-856-5	100.12	E	G	E	E	E	E	E	E	F	F	E	E	E	E	E	E
Glycerine, pure	56-81-5	200-289-5	92.09	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Glycerol, pure	56-81-5	200-289-5	92.09	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Hexane, pure	110-54-3	203-777-6	86.18	N	N	G	F	G	F	G	F	F	N	E	G	E	E	E	E
Hydrated Alumina, pure	21645-51-2	244-492-7	78.00	E	G	E	E	E	G	E	E	E	G	E	E	E	E	E	E
Hydrazine, pure	302-01-2	206-114-9	32.05	N	N	N	N	N	N	N	N	N	N	N	N	E	E	E	E
Iodine Crystals, pure	7553-56-2	231-442-4	126.90	N	N	N	N	G	F	F	N	G	N	N	N	E	E	E	E
Isobutanol, pure	78-83-1	201-148-0	74.12	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E
iso-Butyl Alcohol, pure	78-83-1	201-148-0	74.12	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E
Isopropanol, pure	67-63-0	200-661-7	60.10	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Isopropyl Acetate, pure	108-21-4	203-561-1	102.13	G	F	E	G	G	F	G	F	G	F	E	E	E	E	E	E
Isopropyl Alcohol, pure	67-63-0	200-661-7	60.10	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Isopropyl Benzene, pure	98-82-8	202-704-5	120.19	F	N	F	N	F	N	F	N	N	N	G	F	E	E	E	E
Isopropyl Ether, pure	108-20-3	203-560-6	102.18	N	N	F	N	N	N	N	N	N	N	E	G	E	E	E	E
Jet Fuel, pure	94114-58-6	302-694-3	N/A	F	N	F	N	F	N	F	N	F	N	E	G	E	E	E	E
Kerosene, pure	8008-20-6	232-366-4	N/A	F	N	G	F	E	F	E	G	G	F	E	G	E	E	E	E
Lacquer Thinner, pure	N/A		N/A	N	N	F	N	G	N	F	N	G	F	E	G	E	E	E	E
L-alpha-amino Propionic Acid, pure	56-41-7	200-273-8	89.09	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Lead Acetate, pure	301-04-2	206-104-4	325.29	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
L-Tartaric Acid, pure	87-69-4	201-766-0	150.09	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Magnesium Chloride, pure	7786-30-3	232-094-6	95.21	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
MEK, pure	78-93-3	201-159-0	72.11	N	N	F	N	G	F	E	G	F	N	E	G	E	E	E	E
Mercuric Chloride, pure	7487-94-7	231-299-8	271.50	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Methoxyethyl Oleate, pure	111-10-4	203-834-5	340.54	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E
Methyl Acetate, pure	79-20-9	201-185-2	74.08	F	N	F	F	G	F	G	F	E	E	E	G	E	E	E	E
Methyl Alcohol, pure	67-56-1	200-659-6	32.04	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Methyl Ethyl Ketone, pure	78-93-3	201-159-0	72.11	G	F	F	N	G	F	E	G	F	N	E	G	E	E	E	E
Methyl Isobutyl Ketone, pure	108-10-1	203-550-1	100.16	G	F	F	N	G	F	G	F	F	F	F	F	E	E	E	E
Methyl Propyl Ketone, pure	107-87-9	203-528-1	86.13	G	F	N	N	G	F	G	F	F	F	G	F	E	E	E	E
Methylene Chloride, pure	75-09-2	200-838-9	84.93	N	N	F	N	F	N	F	N	F	N	G	F	E	E	E	E
Methyloxirane, pure	75-56-9	200-879-2	74.12	F	F	G	F	F	N	F	F	F	N	E	G	E	E	E	E
Methyl-t-Butyl Ether, pure	1634-04-4	216-653-1	88.15	N	N	F	N	F	N	F	N	E	E	G	F	E	E	E	E
MIBK, pure	108-10-1	203-550-1	100.16	G	F	N	N	G	F	G	F	F	F	F	F	E	E	E	E
Mineral Spirits, pure	64475-85-0		N/A	F	N	F	N	F	N	F	N	E	E	G	F	E	E	E	E
n-Butanol, pure	71-36-3	200-751-6	74.12	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E
n-Butyl Acetate, pure	123-86-4	204-658-1	116.16	G	F	E	G	F	N	G	F	G	F	E	G	E	E	E	E
n-Butyl Alcohol, pure	71-36-3	200-751-6	74.12	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E

**E** No damage after 30 days of constant exposure.

**G** Little or no damage after 30 days of constant exposure.

**F** Some effect after 7 days of constant exposure.

**N** Immediate damage may occur. Not recommended for continuous use.

	Labware Fluoropolymers, continued						Other Labware Polymers																		Specialty Materials					
	PFA		Halar® ECTFE		Tefzel® ETFE		PETG		PC		PSF		PS		PMMA		SAN		PEI		RESMER™		PMX		TMX		PET			
	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50		
	E	E	E	G	E	G	-	-	G	N	G	F	F	N	N	N	F	N	E	-	F	N	F	N	E	G	E	G		
	E	E	E	E	E	E	G	-	E	G	E	G	F	N	E	N	E	G	E	-	G	F	G	F	E	G	E	G		
	E	E	E	E	E	E	G	-	F	N	F	F	N	N	N	N	F	N	G	G	F	N	F	N	E	G	E	G		
	E	E	E	G	E	G	-	-	E	F	E	G	E	F	G	F	-	-	E	E	E	G	F	F	E	-	E	-		
	E	E	E	G	E	G	G	N	E	F	E	G	E	F	G	-	-	-	E	E	G	G	F	F	E	-	E	-		
	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	-	E	E	E	G	E	E	E	E	E	F	E	F		
	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	-	E	E	E	G	E	E	E	E	E	F	E	F		
	E	E	E	G	E	E	G	-	F	N	E	G	N	N	E	-	E	E	E	F	G	F	F	N	E	-	E	-		
	E	E	E	E	E	E	E	G	F	N	G	G	G	G	E	E	G	G	-	-	E	E	E	G	E	E	E	E		
	E	E	G	F	F	N	-	-	N	N	N	N	N	N	-	-	-	-	-	-	-	-	N	N	-	-	-	-		
	E	E	E	E	E	G	-	-	G	N	E	F	G	F	N	N	N	N	F	N	E	G	G	N	-	-	-	-		
	E	E	E	E	E	E	F	N	E	G	E	G	G	G	N	N	G	N	E	E	E	E	E	G	E	N	E	N		
	E	E	E	E	E	E	F	N	E	G	E	G	G	G	N	N	G	N	E	E	E	E	E	G	E	N	E	N		
	E	E	E	E	E	E	F	N	G	F	E	G	E	G	N	N	E	F	E	E	E	E	E	E	E	F	E	N		
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	G	F	-	-	G	F	-	-	-	-		
	E	E	E	E	E	E	F	N	G	F	E	G	E	G	N	N	E	F	E	E	E	E	E	E	E	F	E	N		
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	N	N	-	-	-	-		
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	-	-	-	-	-	-	G	F	-	-	-	-		
	E	E	E	E	E	G	G	N	G	N	G	F	G	F	N	N	-	-	E	-	G	F	F	N	E	G	E	G		
	E	E	E	E	E	E	G	-	E	G	E	G	F	N	E	N	E	G	E	-	G	F	G	F	E	G	E	G		
	E	E	E	E	E	E	N	N	N	N	N	N	N	N	N	N	-	-	-	-	G	F	G	F	-	-	-	-		
	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E		
	E	E	E	E	E	E	-	-	E	G	E	E	E	G	E	E	E	E	E	E	E	E	E	E	-	-	-	-		
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E		
	E	E	G	F	E	G	G	-	N	N	N	N	N	N	N	N	N	N	G	N	F	N	F	N	E	G	E	G		
	E	E	E	E	E	E	E	G	E	E	E	E	E	G	E	E	E	E	-	-	E	E	E	E	E	E	E	E		
	E	E	E	E	E	E	G	-	F	N	F	N	N	N	F	N	-	-	-	-	-	-	E	G	-	-	-	-		
	E	E	E	G	E	E	N	N	N	N	N	N	N	N	N	N	-	-	G	F	-	-	E	E	N	N	N	N		
	E	E	E	E	E	E	N	N	G	F	E	G	F	F	N	N	N	E	G	E	G	E	E	E	N	E	N	N		
	E	E	G	F	E	G	G	-	N	N	N	N	N	N	N	N	N	N	G	N	F	N	F	N	E	G	E	G		
	E	E	E	G	E	G	N	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	F	E	F	G	F			
	E	E	E	E	E	E	N	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	F	E	-	E	-			
	E	E	F	N	G	F	N	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	N	N	N	N	N		
	E	E	E	E	E	E	G	F	F	N	F	N	N	N	N	N	N	-	-	F	N	F	N	F	N	F	N	N		
	E	E	E	E	E	E	N	N	N	N	N	N	N	N	N	N	-	-	-	-	-	-	E	E	-	-	-	-		
	E	E	E	E	E	E	N	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	F	E	F	G	F			
	E	E	E	E	E	E	G	-	F	F	F	F	F	F	N	N	G	F	-	-	G	F	E	E	-	-	-	-		
	E	E	E	E	E	E	-	-	E	E	E	E	E	G	N	N	E	N	E	E	E	E	E	G	E	N	E	N		
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	G	N	-	-	G	F	G	N	G	N	N		
	E	E	E	E	E	E	-	-	E	E	E	E	E	G	N	N	E	N	E	E	E	E	E	G	E	N	E	N		



## ► Labware Chemical Resistance Table, continued

				Labware Olefin Polymers												Labware Fluoropolymers				
				LDPE		HDPE		PPP		PPCO		PMP		FLPE		FEP		TFE/PTFE		
Chemical, Concentration	CAS #	EC Number	M.W.	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	
n-Decane, pure	124-18-5	204-686-4	142.28	F	N	F	N	F	N	F	N	F	N	G	F	E	E	E	E	
n-Heptane, pure	142-82-5	205-563-8	100.20	F	N	G	F	F	N	F	F	F	F	G	G	E	E	E	E	
Nitrobenzene, pure	98-95-3	202-716-0	123.11	N	N	N	N	N	N	N	N	F	N	F	F	E	E	E	E	
Nitrohydrochloric Acid, pure	8007-56-5		N/A	N	N	N	N	N	N	N	N	N	N	N	N	E	E	E	E	
Nitromethane, pure	75-52-5	200-876-6	61.04	N	N	F	N	N	N	F	N	E	F	G	F	E	E	E	E	
n-Octane, pure	111-65-9	203-892-1	114.23	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Oil, Cedarwood, pure	8000-27-9		N/A	N	N	F	N	N	N	N	N	N	N	E	G	E	E	E	E	
Oil, Cinnamon, pure	8015-91-6		N/A	N	N	F	N	N	N	G	F	N	N	E	G	E	E	E	E	
Oil, Mineral, pure	8012-95-1	232-384-2	N/A	G	N	E	E	G	F	E	G	E	G	E	E	E	E	E	E	
Oil, Orange, pure	8008-57-9		N/A	G	N	G	F	G	F	G	F	F	F	E	G	E	E	E	E	
Oil, Pine, pure	8006-88-0		N/A	G	N	F	N	E	G	E	G	G	F	E	G	E	E	E	E	
Orange Oil, pure	8008-57-9		N/A	G	N	G	F	G	F	G	F	F	F	E	G	E	E	E	E	
Orthoarsenic Acid, pure	7778-39-4	231-901-9	141.94	G	F	E	E	E	E	E	G	E	E	E	E	E	E	E	E	
Ozone, pure	10028-15-6	233-069-2	48.00	G	N	G	N	F	N	E	G	E	E	G	N	E	E	E	E	
p-Chloroacetophenone, pure	99-91-2	202-800-7	154.60	E	E	E	E	G	F	E	E	E	E	E	E	E	E	E	E	
p-Dichlorobenzene, pure	106-46-7	203-400-5	147.00	F	N	N	N	G	F	G	F	G	F	F	F	E	E	E	E	
Pentyl acetate, pure	628-63-7	211-047-3	130.18	G	F	E	G	G	F	G	F	G	F	E	E	E	E	E	E	
Perchloric Acid, pure	7601-90-3	231-512-4	100.46	G	N	G	N	G	N	G	N	G	N	G	N	G	F	G	F	
Perchloroethylene, pure	127-18-4	204-825-9	165.83	N	N	N	N	N	N	N	N	N	N	F	F	E	E	E	E	
Petroleum, pure	64742-82-1	265-185-4	N/A	N	N	G	N	F	N	N	N	G	F	E	F	E	E	E	E	
Phenyl Methyl Ketone, pure	98-86-2	202-708-7	120.15	N	N	F	F	G	F	F	N	G	N	G	G	E	E	E	E	
Phenylacrolein, pure	104-55-2	203-213-9	132.16	N	N	F	N	N	N	N	N	N	N	E	F	E	E	E	E	
Picric Acid, pure	88-89-1	201-865-9	229.11	N	N	N	N	N	N	N	N	E	E	N	N	E	E	E	E	
Pine Oil, pure	8006-88-0		N/A	G	N	F	N	E	G	E	G	G	F	E	G	E	E	E	E	
Potassium Chloride, pure	7447-40-7	231-211-8	74.55	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Potassium Permanganate, pure	7722-64-7	231-760-3	158.03	E	G	G	F	E	G	E	E	E	E	E	E	E	E	E	E	
Propane, pure	74-98-6	200-827-9	44.10	E	F	E	E	E	E	E	E	G	F	E	E	E	E	E	E	
Propionic Acid, pure	79-09-4	201-176-3	74.08	F	N	E	F	E	G	E	G	E	F	E	F	E	E	E	E	
Propylene Glycol, pure	57-55-6	200-338-0	76.10	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Pyridine, pure	110-86-1	203-809-9	79.10	N	N	F	N	E	F	N	N	F	N	N	N	E	E	E	E	
Salicylaldehyde, pure	90-02-8	201-961-0	122.12	E	G	E	E	E	G	E	G	E	G	E	E	E	E	E	E	
sec-Butanol, pure	78-92-2	201-158-5	74.12	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E	
sec-Butyl Alcohol, pure	78-92-2	201-158-5	74.12	E	G	E	E	E	E	E	E	E	G	E	E	E	E	E	E	
Silicone Oil, pure	63148-62-9		N/A	E	G	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Silver Acetate, pure	563-63-3	209-254-9	166.91	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Silver Nitrate, pure	7761-88-8	231-853-9	169.87	E	G	E	E	E	E	E	G	E	E	E	E	E	E	E	E	
Skydrol LD4 Aviation Hydraulic Fluid, pure	N/A		N/A	G	F	E	G	E	G	E	G	E	G	E	E	E	E	E	E	
Soda Ash, pure	497-19-8	207-838-8	105.99	E	E	E	G	E	E	E	E	E	E	G	F	E	E	E	E	
Sodium Acetate, pure	127-09-3	204-823-8	82.03	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Sodium Carbonate, pure	497-19-8	207-838-8	105.99	E	E	E	G	E	E	E	E	E	E	G	F	E	E	E	E	

**E** No damage after 30 days of constant exposure.

**G** Little or no damage after 30 days of constant exposure.

**F** Some effect after 7 days of constant exposure.

**N** Immediate damage may occur. Not recommended for continuous use.



	Labware Fluoropolymers, continued						Other Labware Polymers														Specialty Materials							
	PFA		Halar® ECTFE		Tefzel® ETFE		PETG		PC		PSF		PS		PMMA		SAN		PEI		RESMER™		PMX		TMX		PET	
	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
	E	E	E	E	E	E	-	-	F	N	G	F	F	N	N	N	-	-	-	-	G	F	F	N	-	-	-	-
	E	E	E	E	E	E	E	-	F	N	G	G	N	N	E	-	E	E	G	N	G	F	F	F	E	-	E	-
	E	E	E	G	E	E	N	N	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	G	N	G	N
	E	E	E	G	E	G	N	N	N	N	N	N	N	N	N	N	G	N	N	N	N	N	N	N	N	N	N	N
	E	E	E	F	E	G	N	N	F	N	F	N	N	N	N	N	-	-	E	-	E	E	E	F	N	N	N	N
	E	E	E	E	E	E	-	-	G	F	G	F	N	N	-	-	N	N	E	-	G	F	E	E	-	-	-	-
	E	E	E	G	E	G	-	-	G	F	G	F	N	N	F	N	N	N	E	E	E	E	N	N	E	N	E	N
	E	E	E	E	E	E	G	N	E	E	E	E	E	E	E	N	E	E	E	E	E	E	E	G	E	E	E	E
	E	E	E	G	E	E	-	-	F	F	F	F	N	N	F	N	N	N	E	E	E	E	F	F	E	N	E	N
	E	E	E	G	E	G	-	-	G	F	G	F	N	N	F	N	N	N	E	E	E	E	G	F	E	N	E	N
	E	E	E	G	E	E	-	-	F	F	F	F	N	N	F	N	N	N	E	E	E	E	F	F	E	N	E	N
	E	E	E	E	E	E	-	-	E	E	E	E	E	E	-	-	-	-	-	-	E	E	E	E	-	-	-	-
	E	E	E	E	E	E	-	-	N	N	E	E	F	F	E	E	G	G	G	G	F	F	E	E	-	-	-	-
	E	E	E	E	E	E	-	-	G	N	G	N	N	N	N	N	-	-	-	-	F	N	E	E	-	-	-	-
	E	E	E	N	E	G	N	N	N	N	N	N	N	N	N	N	N	N	-	-	F	N	G	F	G	N	F	N
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	G	F	-	-	G	F	E	-	E	-
	G	F	G	F	G	F	-	-	N	N	N	N	G	F	F	N	G	G	F	F	G	F	G	N	-	-	-	-
	E	E	E	G	E	E	N	N	N	N	N	N	N	N	N	N	E	G	E	-	F	N	N	N	G	N	G	N
	E	E	E	G	E	E	E	-	G	N	E	G	F	N	N	N	E	G	E	E	G	F	G	F	E	G	E	G
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	G	N	-	-	-	-
	E	E	E	G	E	G	-	-	G	F	G	F	N	N	N	N	N	N	E	E	E	E	N	N	E	N	E	N
	E	E	G	F	G	F	-	-	N	N	N	N	G	F	N	N	E	E	-	-	G	F	E	E	-	-	-	-
	E	E	E	G	E	G	-	-	G	F	G	F	N	N	F	N	N	N	E	E	E	E	G	F	E	N	E	N
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	-	-	E	E	E	E	E	G	F	N	G	F	-	-	E	E	E	E	G	F	G	F
	E	E	E	E	E	E	E	E	E	E	E	E	N	N	E	E	E	E	-	-	E	E	G	F	E	E	E	E
	E	E	E	F	E	G	-	-	N	N	G	G	G	N	-	-	-	-	E	E	E	G	E	F	-	-	-	-
	E	E	E	E	E	E	-	-	G	F	G	G	E	E	E	-	E	E	E	E	E	E	E	E	-	-	-	-
	E	E	N	N	F	G	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	N	G	N	G	N
	E	E	E	N	E	G	-	-	G	F	G	F	N	N	-	-	N	N	-	-	F	N	E	G	-	-	-	-
	E	E	E	E	E	E	-	-	E	G	E	G	G	G	-	-	G	N	E	E	E	E	E	G	E	N	E	N
	E	E	E	E	E	E	-	-	E	G	E	G	G	G	N	N	G	N	E	E	E	E	E	G	E	N	E	N
	E	E	E	E	E	E	G	N	E	E	E	E	E	G	F	N	E	E	E	E	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	E	G	E	G	E	E	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	F	F	E	E	E	E	E	E	E	E	E	G	-	-	E	E	E	E	G	F	G	F
	E	E	E	E	E	E	G	N	N	N	N	N	N	N	E	N	-	-	F	N	F	N	E	G	E	G	E	G
	E	E	E	E	E	E	G	F	E	G	E	E	E	G	G	N	E	E	-	-	E	G	E	E	E	G	E	G
	E	E	E	E	E	E	E	G	E	G	E	E	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E



## ► Labware Chemical Resistance Table, continued

				Labware Olefin Polymers												Labware Fluoropolymers				
				LDPE		HDPE		PPP		PPCO		PMP		FLPE		FEP		TFE/PTFE		
Chemical, Concentration	CAS #	EC Number	M.W.	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	
Sodium Dichromate, pure	10588-01-9	234-190-3	261.97	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Stearic Acid, pure	57-11-4	200-313-4	284.48	E	E	E	G	E	G	E	E	E	E	G	G	E	E	E	E	
Sulfur Dioxide, pure	7446-09-5	231-195-2	64.06	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Sulfur Salts, pure	N/A		N/A	F	N	G	F	F	N	F	N	F	N	G	F	E	E	E	E	
Tartaric Acid, pure	87-69-4	201-766-0	150.09	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
TCA, pure	76-03-9	200-927-2	163.39	E	G	F	N	G	F	F	N	E	E	F	N	E	E	E	E	
tert-Butanol, pure	75-65-0	200-889-7	74.12	E	G	E	E	E	G	E	E	E	G	E	E	E	E	E	E	
tert-Butyl Alcohol, pure	75-65-0	200-889-7	74.12	E	G	E	E	E	G	E	E	E	G	E	E	E	E	E	E	
Tetrahydrofuran, pure	109-99-9	203-726-8	72.11	F	N	F	N	G	F	G	F	F	F	G	F	E	E	E	E	
THF, pure	109-99-9	203-726-8	72.11	F	N	F	N	G	F	G	F	F	F	G	F	E	E	E	E	
Thionyl Chloride, pure	7719-09-7	231-748-8	118.97	N	N	N	N	N	N	N	N	N	N	N	N	E	E	E	E	
Tincture of Iodine, pure	N/A		N/A	F	N	E	G	E	E	G	N	N	N	G	F	E	E	E	E	
Toluene, pure	108-88-3	203-625-9	92.14	F	N	N	N	N	N	N	N	F	F	F	F	E	E	E	E	
Tribromomethane, pure	75-25-2	200-854-6	252.73	N	N	N	N	N	N	N	N	F	N	F	F	E	E	E	E	
Tributyl Citrate, pure	77-94-1	201-071-2	360.45	G	F	E	G	G	F	G	F	G	F	E	E	E	E	E	E	
Trichloroacetic Acid, pure	76-03-9	200-927-2	163.39	E	G	F	N	G	F	F	N	E	E	F	N	E	E	E	E	
Trichloroethane, pure	71-55-6	200-756-3	133.40	N	N	F	N	N	N	N	N	-	-	G	F	E	E	E	E	
Trichloroethylene, pure	79-01-6	201-167-4	131.39	N	N	N	N	N	N	N	N	F	N	F	F	E	E	E	E	
Triethylene Glycol, pure	112-27-6	203-953-2	150.173	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E	
Tripropylene Glycol, pure	24800-44-0	246-466-0	192.25	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Tris Buffer Solution, pH 11, pure	N/A		N/A	E	G	E	E	E	G	E	G	E	E	E	G	E	E	E	E	
Tris Buffer Solution, pH 7.0, pure	N/A		N/A	E	G	E	E	E	G	E	G	E	E	E	E	E	E	E	E	
Trisodium Phosphate, pure	7601-54-9	231-509-8	163.94	E	E	E	E	E	E	E	E	E	E	G	F	E	E	E	E	
Tung Oil, pure	8001-20-5	500-776-5	N/A	F	N	E	E	E	E	-	-	-	-	E	E	E	E	E	E	
Tung Oil, pure	8001-20-5	232-272-3	N/A	F	N	E	E	E	E	-	-	-	-	E	E	E	E	E	E	
Undecyl Alcohol, pure	112-42-5	203-970-5	172.31	E	F	E	G	E	G	E	G	E	G	E	E	E	E	E	E	
Urea, pure	57-13-6	200-315-5	60.06	E	E	E	E	E	E	E	E	E	G	E	G	E	E	E	E	
Vinyl Cyanide, pure	107-13-1	203-466-5	53.06	E	E	E	E	F	N	F	N	F	N	E	E	E	E	E	E	
White Spirits, pure	64475-85-0		N/A	F	N	F	N	F	N	F	N	E	E	G	F	E	E	E	E	
Xylene, pure	1330-20-7	215-535-7	106.17	N	N	F	N	F	N	F	N	F	N	G	F	E	E	E	E	
Zinc Stearate, pure	557-05-1	209-151-9	632.34	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	

**E** No damage after 30 days of constant exposure.

**G** Little or no damage after 30 days of constant exposure.

**F** Some effect after 7 days of constant exposure.

**N** Immediate damage may occur. Not recommended for continuous use.

	Labware Fluoropolymers, continued						Other Labware Polymers																Specialty Materials					
	PFA		Halar® ECTFE		Tefzel® ETFE		PETG		PC		PSF		PS		PMMA		SAN		PEI		RESMER™		PMX		TMX		PET	
	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	-	-	E	G	E	G	E	G	E	G	E	G	E	E	E	G	E	E	-	-	-	-
	E	E	E	E	E	E	-	-	E	G	E	G	F	N	N	N	F	F	-	-	F	N	E	E	-	-	-	-
	E	E	E	E	E	G	E	G	F	N	G	G	N	N	G	F	N	N	-	-	-	-	F	N	E	G	E	G
	E	E	E	E	E	E	-	-	E	G	E	E	E	G	E	E	E	E	E	E	E	G	E	E	-	-	-	-
	E	E	E	F	E	G	-	-	F	N	G	N	F	N	N	N	N	N	-	-	F	N	E	E	N	N	N	N
	E	E	E	E	E	E	-	-	E	E	E	E	G	G	-	-	E	N	E	E	E	E	E	G	E	N	E	N
	E	E	E	E	E	E	-	-	E	E	E	E	G	G	-	-	E	N	E	E	E	E	E	G	E	N	E	N
	E	E	N	N	F	F	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	F	G	N	G	N
	E	E	N	N	F	F	-	-	N	N	N	N	N	N	N	N	N	N	-	-	F	N	F	F	G	N	G	N
	E	E	E	E	E	G	E	G	N	N	N	N	N	N	N	N	-	-	-	-	-	-	N	N	E	E	E	E
	E	E	E	E	E	E	-	-	G	N	G	N	G	F	N	N	G	N	E	F	E	G	N	N	-	-	-	-
	E	E	E	G	E	E	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	F	F	G	N	G	N
	E	E	G	F	E	F	-	-	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	-	-	-	-
	E	E	E	G	E	G	-	-	N	N	F	N	N	N	-	-	-	-	-	-	-	-	G	F	-	-	-	-
	E	E	E	F	E	G	-	-	F	N	G	N	F	N	N	N	N	N	-	-	F	N	E	E	N	N	N	N
	E	E	E	E	E	E	-	-	N	N	N	N	N	N	N	N	N	N	N	N	F	N	-	-	-	-	-	-
	E	E	N	N	F	F	N	N	N	N	N	N	N	N	N	N	N	N	N	N	F	N	F	N	G	N	G	N
	E	E	E	E	E	E	-	-	E	G	E	G	E	G	E	-	-	-	-	-	-	-	E	E	-	-	-	-
	E	E	E	E	E	E	-	-	E	G	E	E	E	E	-	-	-	-	E	E	E	E	E	E	-	-	-	-
	E	E	E	E	E	E	N	N	F	N	G	F	E	G	E	E	E	E	E	E	E	E	E	E	N	N	N	N
	E	E	E	E	E	E	E	E	G	F	G	F	E	G	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	E	E	E	E	E	E	G	F	G	N	G	F	E	E	G	N	E	E	-	-	E	G	E	E	E	G	E	G
	E	E	E	E	E	E	-	-	-	-	-	-	N	N	E	F	E	E	E	E	E	E	-	-	E	N	E	N
	E	E	E	E	E	E	-	-	-	-	-	-	N	N	E	F	E	E	E	E	E	E	-	-	E	N	E	N
	E	E	E	G	E	G	-	-	G	F	G	F	G	G	-	-	E	E	-	-	E	E	E	G	-	-	-	-
	E	E	E	E	E	E	-	-	G	F	G	F	E	E	E	E	E	E	E	E	E	E	E	G	E	G	E	G
	E	E	E	G	E	G	-	-	N	N	N	N	N	N	N	N	-	-	-	-	F	N	F	N	E	-	E	-
	E	E	E	G	E	G	G	-	F	F	F	F	F	F	N	N	G	F	-	-	G	F	E	E	-	-	-	-
	E	E	E	E	E	G	-	-	N	N	N	N	N	N	N	N	N	N	F	N	F	N	F	N	G	N	G	N
	E	E	E	E	E	E	E	G	E	E	E	E	E	E	E	E	E	E	-	-	E	E	E	E	E	E	E	E



## ► Physical Properties Table

Resin	Max. Use Temp. °C	HDT Temp. °C <sup>1</sup>	Brittleness Temp. °C <sup>13</sup>	Melting Point (°C)	Glass Transition Temp. (°C) <sup>20</sup>	Clarity	Microwavability <sup>2</sup>
<b>ABS</b>	86 to 90	75 to 98	0	210 to 230	105 to 109	Transparent to Opaque	--
<b>ACL</b>	120	177	-55	210 to 220	-83 & 100	Opaque	Marginal <sup>3</sup>
<b>COC</b>	70	70	-40	N/A	90	Transparent	Marginal <sup>3</sup>
<b>ECTFE</b>	150	116	<-76	242	85	Translucent	Yes
<b>EPDM</b>	146	<20	-68	N/A	-45	Opaque	Yes
<b>EPR</b>	145	< 20	-90	N/A	-54	Opaque	Yes
<b>ETFE</b>	150	104	-105	265	N/A	Translucent	Yes
<b>FEP</b>	205	70	-270	275	N/A	Translucent	Marginal <sup>3</sup>
<b>FEP 890</b>	205	70	-75	275	N/A	Transparent	Marginal <sup>3</sup>
<b>FLPE</b>	120	65	-100	125 to 138	-25	Translucent	No
<b>HDPE</b>	120	65	-100	125 to 138	-25	Translucent	No
<b>HIPS</b>	90	87	20	N/A	130	Opaque	Marginal <sup>3</sup>
<b>LDPE</b>	80	45	-100	85 to 125	-25	Translucent	Yes
<b>LLDPE 489 Tubing</b>	79	47	-73	85 to 125	-25	Translucent	Marginal <sup>3</sup>
<b>Modified PPE</b>	121	138	-40	240 to 320	164	Opaque	--
<b>PBS</b>	90	72	20	N/A	87-93	Transparent	Marginal <sup>3</sup>
<b>PC</b>	135	138	-135	N/A	154	Transparent	Marginal <sup>3</sup>
<b>PEI</b>	171	210	<20	N/A	215	Transparent Amber	Yes
<b>Permanox®</b>	174	127	-10	233	N/A	Transparent	Yes
<b>PES</b>	180	>200	-100	N/A	350 to 390	Transparent Amber	--
<b>PET</b>	65	21	-40	240 to 275	70	Transparent	Marginal <sup>3</sup>
<b>PETG</b>	70	70	-40	265	81	Transparent	Marginal <sup>3</sup>
<b>PFA</b>	260	73	-270	302 to 310	-80 & 90	Transparent	Yes
<b>PFA 870 Tubing</b>	260	73	-268	302 to 310	-80 & 90	Transparent	Yes
<b>PMMA</b>	50	79 - 107	20	85 to 105	N/A	Transparent	No
<b>PMP</b>	153 - 174	93 - 127	0 to 20	235	N/A	Transparent	Yes
<b>PP</b>	135	107	0	160 to 176	-20 to -5	Translucent	Yes
<b>PP 689 Tubing</b>	121	100	-4	160 to 176	-20 to -5	Translucent	Yes
<b>PPCO</b>	121	90	-40	150 to 175	-20	Translucent	Marginal <sup>3</sup>
<b>PS</b>	90	96	20	N/A	74 to 110	Transparent	No
<b>PSF</b>	165	174	-100	N/A	185 to 195	Transparent	Yes
<b>PTFE/TFE</b>	260	121	-100	320 to 330	120 to 130	Opaque	Yes
<b>PURS 280 Tubing</b>	85	32	-73	87 to 140	-30 to 0	Transparent Amber	No
<b>PVC 180 Tubing</b>	71	-32	-32	N/A	75 to 105	Transparent	Yes <sup>19</sup>
<b>PVC 380 Tubing</b>	79	-32	-32	N/A	75 to 105	Transparent	Yes <sup>19</sup>
<b>PVC 980 Tubing</b>	82	-32	-21	N/A	75 to 105	Transparent	No
<b>PVDF</b>	150	139	-62	141 to 178	-60 to -20	Translucent	Marginal <sup>3</sup>
<b>ResMer™</b>	130 to 150	200 to 300	20	200 to 270	90 to 110	Opaque	Marginal <sup>3</sup>
<b>SAN</b>	85	98	20	108	N/A	Transparent	Yes
<b>SILI 50/65 Tubing</b>	232	-46	-62	N/A	-130 to -120	Translucent	Yes
<b>Silicone Gaskets</b>	204	-46	-68	N/A	-130 to -120	Transparent to Opaque	Yes
<b>Thermanox®</b>	65	38	-60	220 to 240	80	Transparent	Marginal <sup>3</sup>
<b>TPE</b>	121	<23	<-50	N/A	N/A	Transparent to Opaque	Yes
<b>XLPE</b>	65	59	-118	N/A	N/A	Translucent	No
<b>Tritan™</b>	95	99	-40	282	108	Transparent	Marginal <sup>3</sup>

For abbreviations and footnotes, please see page 626-627.

Resin	Sterilization <sup>4</sup>					Specific Gravity	Flexibility
	Autoclaving	EtO Gas	Dry Heat	Radiation	Disinfectants		
<b>ABS</b>	No	Yes	No	Yes	Some	1.05 to 1.16	Rigid
<b>ACL</b>	Yes <sup>5</sup>	Yes	No	No	Some	1.42 to 1.61	Rigid
<b>COC</b>	Yes	Yes	No	Yes	Some	1.03	Rigid
<b>ECTFE</b>	Yes	Yes	No	Yes	Yes	1.68	Rigid
<b>EPDM</b>	Yes	Yes	No	No	Some	0.86	Moderate to Excellent
<b>EPR</b>	Yes	Yes	No	No	Some	0.86	Moderate to Excellent
<b>ETFE</b>	Yes	Yes	No	Yes	Yes	1.7	Rigid
<b>FEP</b>	Yes	Yes	Yes	No	Yes	2.15	Excellent
<b>FEP 890</b>	Yes	Yes	Yes	No	Yes	2.17	Rigid
<b>FLPE</b>	No	Yes	No	Yes	Yes	0.95	Moderate
<b>HDPE</b>	No	Yes	No	Yes	Yes	0.95	Moderate
<b>HIPS</b>	No	Yes	No	Yes	Some	1.04	Rigid
<b>LDPE</b>	No	Yes	No	Yes	Yes	0.92	Good
<b>LLDPE 489 Tubing</b>	No	Yes	No	No	Some	0.92	Moderate
<b>Modified PPE</b>	Yes	Yes	No	Yes	Some	1.08	Rigid
<b>PBS</b>	No	Yes	No	Yes	Some	0.91 to 1.01	Rigid
<b>PC</b>	Yes <sup>5</sup>	Yes	No	Yes	Some	1.20	Rigid
<b>PEI</b>	Yes	Yes	Yes	Yes	Yes	1.28	Rigid
<b>Permanox®</b>	Yes	Yes	Yes	No	Yes	0.84	Rigid
<b>PES</b>	Yes	Yes	Yes	Yes	Some	1.37	Rigid
<b>PET</b>	No	Yes	No	Yes	Some	1.33	Moderate
<b>PETG</b>	No	Yes	No	Yes	Some	1.27	Moderate
<b>PFA</b>	Yes	Yes	Yes	No	Yes	2.17	Excellent
<b>PFA 870 Tubing</b>	Yes	Yes	Yes	No	Yes	2.15	Rigid
<b>PMMA</b>	No	No	No	Yes	Some	1.19	Rigid
<b>PMP</b>	Yes	Yes	Marginal	No	Yes	0.835	Rigid
<b>PP</b>	Yes	Yes	No	No	Yes	0.9	Rigid
<b>PP 689 Tubing</b>	Yes	Yes	No	No	Some	0.9	Rigid
<b>PPCO</b>	Yes	Yes	No	No	Yes	0.9	Moderate
<b>PS</b>	No	Yes	No	Yes	Some	1.05	Rigid
<b>PSF</b>	Yes	Yes	Yes	Yes	Yes	1.24	Rigid
<b>PTFE/TFE</b>	Yes	Yes	Yes	No	Yes	2.2	Rigid
<b>PURS 280 Tubing</b>	No	Yes	No	No	Some	1.18	Moderate
<b>PVC 180 Tubing</b>	Yes <sup>14</sup>	Yes	No	No	Some	1.19	Excellent
<b>PVC 380 Tubing</b>	Yes <sup>14</sup>	Yes	No	No	Some	1.2	Excellent
<b>PVC 980 Tubing</b>	No	Yes	No	No	Some	1.2	Moderate
<b>PVDF</b>	Yes	Yes	No	Yes	Yes	1.78	Rigid
<b>ResMer™</b>	Yes	Yes	No	Yes	Some	1.15 to 1.50	Rigid
<b>SAN</b>	No	Yes	No	Yes	No	1.07	Rigid
<b>SILI 50/65 Tubing</b>	Yes	Yes	Yes	Yes	Some	1.15	Excellent
<b>Silicone Gaskets</b>	Yes	Yes	Yes	Yes	Yes	1.1 to 1.5	Moderate to Excellent
<b>Thermanox®</b>	No	Yes	No	Yes	Some	1.3	Moderate
<b>TPE</b>	Yes	Yes	No	Yes	Some	0.9	Moderate to Excellent
<b>XLPE</b>	No	Yes	No	Yes	Yes	0.93	Rigid
<b>Tritan™</b>	No	Yes	No	Yes	Some	1.18	Moderate

For abbreviations and footnotes, please see page 626-627.



## ► Physical Properties Table, continued

Resin	Permeability (cc.-mil/100in <sup>2</sup> -24 hr.-atm)			Permeability (cc.-mm/m <sup>2</sup> -24 hr.-Bar)			Water Vapor Transmission Rate		Water Adsorption (%)
	N <sub>2</sub>	O <sub>2</sub>	CO <sub>2</sub>	N <sub>2</sub>	O <sub>2</sub>	CO <sub>2</sub>	(grams/m <sup>2</sup> ) <sup>15</sup>	(grams/100 in <sup>2</sup> ) <sup>16</sup>	
<b>ABS</b>	--	--	--	--	--	--	--	--	0.3 to 0.7
<b>ACL</b>	0.5	1.0	4.1	0.2	0.4	1.6	--	--	0.6
<b>COC</b>	15,871	5,032	1,742	6,167	1,955	677	40.00	2.58	<0.01
<b>ECTFE</b>	10	25	110	3.9	9.7	42.7	3.2	0.2	<0.1
<b>EPDM</b>	25 - 150	75 - 650	800 - 8000	9.7 - 58	29 - 253	3114 - 3108	--	--	0.05
<b>EPR</b>	25 - 150	75 - 650	800 - 8000	9.7 - 58	29 - 253	3114 - 3108	--	--	0.05
<b>ETFE</b>	30	100	250	12	39	97	1.65	0.11	0.03
<b>FEP</b>	320	750	2,200	124.34	291.41	854.82	6.200	0.40	<0.01
<b>FEP 890</b>	334	1,000	2,251	129.62	388.55	874.63	6.2	0.40	<0.01
<b>FLPE</b>	42	185	580	16	72	225	4.6	0.30	<0.01
<b>HDPE</b>	42	185	580	16	72	225	4.6 - 6.2	0.30 - 0.40	<0.01
<b>HIPS</b>	20 - 25	300 - 400	1,000 - 1,500	7.7 - 9.7	116 - 155	388 - 582	1220 - 6102	79 - 394	0.07
<b>LDPE</b>	180	500	2,700	70	194	1,049	15 - 23	1.0 - 1.5	<0.01
<b>LLDPE 489 Tubing</b>	334	1,001	4,670	130	389	1,815	15 - 23	1.0 - 1.5	<0.01
<b>Modified PPE</b>	--	1,000	--	--	389	--	69.70	4.50	0.10 to 0.15
<b>PBS</b>	20 - 25	300 - 400	1,000 - 1,500	7.8 - 9.7	116 - 155	388 - 582	2.20	0.14	0.07 to 0.09
<b>PC</b>	50	300	1,075	19.43	116.57	418	115.00	7.42	0.35
<b>PEI</b>	19	37	171	7.2	14.4	67	5.8	0.37	0.25
<b>Permanox®</b>	8,000	32,000	115,000	3,108	12,434	44,684	6.00	0.39	<0.01
<b>PES</b>	--	--	--	--	--	--	--	--	0.55
<b>PET</b>	0.7 - 1.0	13	70	0.27 - 0.39	5.1	27	18.13	1.17	0.25
<b>PETG</b>	10	25	125	3.9	9.7	49	18.13	1.17	0.13
<b>PFA</b>	291	881	2,260	113	342	878	2.0	0.13	<0.02
<b>PFA 870 Tubing</b>	300	1,084	2,502	117	421	972	2.0	0.13	<0.02
<b>PMMA</b>	2.78	12.4	68	1.08	4.8	26	55.20	3.56	0.35
<b>PMP</b>	8,000	32,000	115,000	3,108	12,434	44,684	775.00	50.00	0.01
<b>PP</b>	48	240	800	18.7	93	311	3.90	0.25	<0.02
<b>PP 689 Tubing</b>	67	417	1,501	26	162	583	3.9	0.25	<0.02
<b>PPCO</b>	45	200	650	17	78	253	4.40	0.28	<0.02
<b>PS</b>	20 - 25	300 - 400	1,000 - 1,500	7.8 - 9.7	116 - 155	388 - 582	1220 - 6102	79 - 394	0.05
<b>PSF</b>	55	300	700	21.40	117	272	--	--	0.3
<b>PTFE/TFE</b>	--	308	--	--	120	--	4.00	0.26	<0.01
<b>PURS 280 Tubing</b>	5.0 - 83	16.7 - 167	66.7 - 417	1.9 - 32.4	6.5 - 65	26 - 162	--	--	1.12
<b>PVC 180 Tubing</b>	8.3 - 33	16.7 - 100	167 - 584	3.2 - 13	2.6 - 39	64.8 - 227	15 - 80	1.0 - 5.2	0.15 to 0.75
<b>PVC 380 Tubing</b>	8.3 - 33	16.7 - 100	167 - 584	3.2 - 13	2.6 - 39	64.8 - 227	15 - 80	1.0 - 5.2	0.15 to 0.75
<b>PVC 980 Tubing</b>	8.3 - 33	16.7 - 100	167 - 584	3.2 - 13	2.6 - 39	64.8 - 227	15 - 80	1.0 - 5.2	0.15 to 0.75
<b>PVDF</b>	9	14	505	3.5	5.4	196	29.76	1.9	0.05
<b>ResMer™</b>	--	--	--	--	--	--	--	--	0.01
<b>SAN</b>	--	--	--	--	--	--	--	--	0.2
<b>SILI 50/65 Tubing</b>	46,116	132,762	335,741	17,918	51,585	130,453	--	--	0.1
<b>Silicone Gaskets</b>	--	--	--	--	--	--	--	--	0.1
<b>Thermanox®</b>	1.60	8.1	38.7	0.62	3.15	15.04	--	--	0.25
<b>TPE</b>	31 - 145	85 - 646	900 - 8634	12.05 - 56	33.03 - 251	350 - 3355	--	--	0.05 to 0.1
<b>XLPE</b>	42	185	580	16	72	225	4.6 - 6.2	0.3 - 0.4	<0.01
<b>Tritan™</b>	--	--	--	--	--	--	--	--	0.43

For abbreviations and footnotes, please see page 626-627.



Resin	Non-Cytotoxicity <sup>6</sup>	Suitability for Food and Bev. Use <sup>7</sup>	Regulation Part 21 CFR	Refractive Index	Transparency (%)	Haze (%)	Hardness (Rockwell R/M or Shore D/A)	Coefficient of Friction (static)
<b>ABS</b>	--	--	--	--	78 to 90	2.5 to 11	93 to 115 R	--
<b>ACL</b>	Yes	Yes <sup>8</sup>	177.2480	1.48 to 1.51	0	--	94 - 120 R	0.07-0.20
<b>COC</b>	Yes	Yes	177-1520	1.533	91	--	--	--
<b>ECTFE</b>	Yes	Yes	177.1380	1.4200	--	--	90 R / 75 D	0.19
<b>EPDM</b>	--	Yes <sup>9</sup>	177.2600	--	0	--	45 - 87 A	0.725
<b>EPR</b>	--	Yes <sup>9</sup>	177.2600	--	0	--	45 - 87 A	0.853
<b>ETFE</b>	Yes	Yes	177.1380	1.3580	--	--	50 R	--
<b>FEP</b>	Yes	Yes	177.1550	1.341 to 1.347	96	--	60 D / 25 to 45 R	0.03 to 0.40
<b>FEP 890</b>	--	Yes	177.1550	1.347	96	--	58 D	--
<b>FLPE</b>	Yes	Yes <sup>9</sup>	177.1615	1.5400	--	--	60 to 73 D	0.29
<b>HDPE</b>	Yes	Yes <sup>9</sup>	177.1520	1.5400	--	--	60 to 73 D	0.29
<b>HIPS</b>	Yes	Yes	177.1640	--	0	--	--	--
<b>LDPE</b>	Yes	Yes <sup>9</sup>	177.1520	1.5100	--	--	41 to 46 D	--
<b>LLDPE 489 Tubing</b>	--	Yes <sup>9</sup>	177.1520	1.5100	--	--	50 D	--
<b>Modified PPE</b>	Yes	Yes	177.2460 <sup>17</sup>	--	0	--	115 R to 120 R / 78 M	--
<b>PBS</b>	Yes	Yes	177.1640	1.535 to 1.573	90 to 95	--	53 to 64 D	--
<b>PC</b>	Yes	Yes	177.1580	1.5860	91	--	70 M	0.31
<b>PEI</b>	--	Yes	177.1595	1.4600	58	--	125 R	--
<b>Permanox®</b>	Yes	Yes	177.1520	1.46	94	--	87 R	--
<b>PES</b>	Yes	Yes	177.2440	1.65	90	--	120 to 127 R	88 M
<b>PET</b>	Yes	Yes	177.1315	1.5750	85	--	112 R	0.2 to 0.4
<b>PETG</b>	Yes	Yes <sup>10</sup>	177.1315	1.57	91	--	106 R	--
<b>PFA</b>	Yes	No	--	1.3580	93.5	--	55 D	0.18
<b>PFA 870 Tubing</b>	--	Yes	177.1550	1.3580	93.5	--	60 D	--
<b>PMMA</b>	Yes	Yes	177.1010	1.48 to 1.57	92	--	92 to 100 M	--
<b>PMP</b>	Yes	Yes <sup>11</sup>	177.1520	1.4630	93	2.1	85 R	--
<b>PP</b>	Yes	Yes	177.1520	1.4735 to 1.490	--	--	80-110 R / 70-75 D	0.24
<b>PP 689 Tubing</b>	--	Yes	177.1520	1.4900	--	--	75 D	--
<b>PPCO</b>	Yes	Yes	177.1520	1.4735 to 1.5100	--	--	80-100 R / 70-75 D	0.24
<b>PS</b>	Yes	Yes	177.1640	1.5894	90	--	60 to 90 M	--
<b>PSF</b>	Yes	Yes	177.1655	1.6330	86	--	120 R	0.29
<b>PTFE/TFE</b>	Yes	Yes	177.1550	1.3500	0	--	58 R / 50-65 D	0.04
<b>PURS 280 Tubing</b>	--	No	--	1.5 to 1.6	--	--	85 A	--
<b>PVC 180 Tubing</b>	--	Yes <sup>12</sup>	176.180 / 175.300	1.53 to 1.55	--	--	55 A	--
<b>PVC 380 Tubing</b>	--	Yes <sup>12</sup>	176.180 / 175.300	1.53 to 1.55	--	--	65 A	--
<b>PVC 980 Tubing</b>	--	Yes <sup>12</sup>	176.180 / 175.300	1.53 to 1.55	--	--	65 A	--
<b>PVDF</b>	Yes	Yes	177.2510	1.4200	--	--	78 D	0.3
<b>ResMer™</b>	--	--	--	--	--	--	--	--
<b>SAN</b>	--	Yes	177.1040	1.5700	89	--	125 R	--
<b>SILI 50/65 Tubing</b>	Yes	Yes <sup>9</sup>	177.2600	1.4035	--	--	50 A / 65 A	--
<b>Silicone Gaskets</b>	--	Yes <sup>9</sup>	177.2600	--	0 to 95	--	--	--
<b>Thermanox®</b>	Yes	Yes	177.1315	1.57	91	--	94 M	0.2 to 0.4
<b>TPE</b>	Yes	Yes	177.2600	--	0 to 95	--	--	--
<b>XLPE</b>	Yes	No	--	1.5400	--	--	50 to 70 R	0.1 to 0.2
<b>Tritan™</b>	Yes	Yes	174.5(d)(5) FCN 729	--	90	1	112 R	--

For abbreviations and footnotes, please see page 626-627.



## ► Physical Properties Abbreviations

Table of Abbreviations

Abbreviation	Name
ACL	Acetal
COC	Cyclic Olefin Copolymer
ECTFE	Ethylene Chlorotrifluoroethylene
EPDM	Ethylene Propylene Diene Monomer Rubber
EPR	Ethylene Propylene Rubber
ETFE	Ethylene Tetrafluoroethylene
FEP	Fluorinated Ethylene Propylene
FLPE	Fluorinated High-density Polyethylene
HDPE	High-density Polyethylene
HIPS	High Impact Polystyrene
LDPE	Low Density Polyethylene
PC	Polycarbonate
PEI	Polyetherimide
PET	Polyethylene terephthalate
PETG	Polyethylene terephthalate copolymer
PFA	Perfluoroalkoxy
PMMA	Polymethylmethacrylate
PMP	Polymethylpentene
PP	Polypropylene
PPCO	Polypropylene Copolymer
PPE	Modified Polyphenylene Ether
PS	Polystyrene
PSF	Polysulfone
PURS	Thermoplastic Polyester Polyurethane
PVDF	Polyvinylidenedifluoride
ResMer™	ResMer™ - Glass Filled
SAN	(No Suggestions)
Silicone Gaskets	Silicone - Gaskets, filled - typically red
Silicone 50/65 Tubing	Silicone - Tubing, and unfilled (translucent) o-rings
PTFE / TFE	Tetrafluoroethylene
TPE	Thermoplastic Elastomer
Thermanox®	Proprietary NUNC Resin
Permanox®	Proprietary NUNC Resin
Tritan™	Proprietary CoPolyester

## ► Physical Properties Footnotes

- 1 Heat Deflection Temperature is the temperature at which an injection molded bar deflects 0.01 in. when placed under 66 psig (ASTM D648) of pressure. Materials may be used above Heat Deflection Temperatures in non-stress applications; see Max. Use Temp.
- 2 Ratings based on five minute tests using 600 watts of power on exposed, empty labware. CAUTION: Do not exceed Max. Use Temp., or expose labware to chemicals which heating cause to attack the plastic or be rapidly absorbed.
- 3 The plastic will absorb and retain significant amounts of heat resulting in an unexpectedly hot surface.
- 4 **STERILIZATION:**  
 Autoclaving (121°C, 15 psig for 20 minutes) – Clean and rinse items with distilled before autoclaving. (Always completely disengage thread before autoclaving.) Certain chemicals which have no appreciable effect on resins at room temperature may cause deterioration at autoclaving temperatures unless removed with distilled water before hand.  
 EtO Gas – Ethylene Oxide: 100% EtO, EtO:Nitrogen mixture, EtO:HCFC mixture  
 Dry Heat – exposure to 160°C for 120 minutes without stress/load on the polymer parts  
 Disinfectants – Benzalkonium chloride, formalin/formaldehyde, hydrogen peroxide, ethanol, etc.  
 Radiation – gamma or beta irradiation at 25 kGy (2.5 MRad) with unstabilized plastic.
- 5 Sterilizing reduces mechanical strength. Do not use PC vessels for vacuum applications if they have been autoclaved. Refer to Use and Care Guidelines for Nalgene™ Labware, for detailed information on sterilizing.
- 6 "Yes" indicates the resin has been determined to be non-cytotoxic, based on USP and ASTM biocompatibility testing standards utilizing an MEM elution technique with WI38 human diploid lung cell line.
- 7 Resins meet requirements of CFR21 section of Food Additives Amendment of the Federal Food and Drug Act. End users are responsible for validation of compliance for specific containers used in conjunction with their particular applications.
- 8 Acceptable for aqueous foods only, at temperatures up to 121°C / 250°F. Not sanctioned for use with alcoholic or fatty foods at any temperature.
- 9 Acceptable for:  
 Nonacid, aqueous products; may contain salt, sugar or both (pH above 5.0)  
 Dairy products and modifications; oil-in-water emulsions, high or low fat  
 Moist bakery products with surface containing no free fat or oil  
 Dry solids with the surfaces containing no free fat or oil (no end-test required) and under all conditions as described in Table 2 of FDA Regulation 177.1520 except condition A - high temperature sterilization (e.g. over 100°C / 212°F)
- 10 Acceptable for:  
 Alcoholic foods containing not more than 15% (by volume) alcohol; fill and storage temperature not to exceed 49°C (120°F)  
 Non-alcoholic foods of hot fill to not exceed 82°C (180°F) and 49°C (120°F) in storage.  
 Not suitable for carbonated beverages or beer or packaging food requiring thermal processing.
- 11 Straight-sided jars, beakers and graduated cylinders only.
- 12 Acceptable for aqueous, oil, dairy, acidic, and alcoholic foods up to 71°C/160°F.
- 13 The brittleness temperature is the temperature at which an item made from the resin may break or cracked if dropped. This is not the lowest use temperature if care is exercised in use and handling.
- 14 The tubing will become opaque from absorbed water, see the current NALGENE® Labware catalog information on Autoclaving PVC Tubing for details.
- 15 WVTR = Water Vapor Transmission rate in g-mm/m<sup>2</sup> - 24 hr. - 1 Bar at 37°C and 90% Relative Humidity.
- 16 WVTR = Water Vapor Transmission rate in g-mm/100 in<sup>2</sup> - 24 hr. - 1 Bar at 37°C and 90% Relative Humidity.
- 17 Acceptable for:  
 Frozen or refrigerated storage: Ready-prepared foods intended to be reheated in container at time of use  
 1. Aqueous or oil-in-water emulsion of high- or low-fat.  
 2. Aqueous, high- or low-free oil or fat.
- 18 Will vary based on exact composition
- 19 If microwaved in the presence of water; the tubing will become opaque from absorbed moisture, see the current Nalgene Labware catalog information on Autoclaving PVC Tubing for details.
- 20 Glass Transition Temperature is the reversible transition in amorphous or semi-amorphous materials from a hard and relatively brittle state into a flexible or rubber-like state without becoming a true liquid.



## Chemical Resistance Summary

General Class of Chemical	Olefin Resins						Polyester Resins			"Engineering" Resins					"Commodity" Resins					Specialty Resins		
	LDPE	HDPE	PMP	PP	PPCO	FLPE	PETG	PET	Tritan™	PC	PSF	ACL	PPE	PEI	PS	HIPS	PBS	SAN	PMMA	Barex	ResMer™ N	ResMer™
Acids, dilute or weak	E	E	E	E	E	E	G	E	G	E	E	F	E	E	E	E	E	E	G	G	E	E
Acids, strong or concentrated	G	G	E	G	G	G	N	F	N	N	G	N	G	F	F	F	G	F	N	F	G	G
Acids	G	G	E	G	G	G	N	F	N	N	G	N	G	F	F	F	G	F	N	F	G	G
Bases/Alkali, Inorganic, dilute or weak	E	E	E	E	E	G	F	F	F	F	E	G	E	G	E	G	E	E	G	F	E	E
Bases/Alkali, Inorganic, strong or concentrated	E	E	E	E	E	F	N	N	N	N	G	G	G	G	E	G	E	G	F	F	E	E
Bases/Alkali, Inorganic	E	E	E	E	E	G	N	N	N	N	G	G	G	G	E	G	E	G	F	F	E	E
Amines, aliphatic	F	G	G	G	G	F	N	G	F	N	N	G	G	G	G	F	F	G	F	F	E	E
Amines, aromatic	F	F	F	G	F	G	N	G	F	N	N	G	N	E	N	N	N	N	N	F	F	F
Amines	F	G	G	G	F	G	N	G	F	N	N	G	F	G	N	N	N	N	N	F	G	G
Bases/Alkali, Organic/Inorganic	F	G	G	G	G	F	N	F	N	N	F	G	F	G	F	F	F	F	F	F	G	G
Oxidizing Agents	F	F	G	F	F	F	F	N	N	F	G	N	F	F	G	F	N	F	N	G	G	G
Oxidizing Agents, strong or concentrated	F	F	G	F	F	F	F	N	N	F	G	N	F	F	G	F	N	F	N	G	G	G
Oxidizing Agents, dilute or weak	G	G	G	G	G	G	F	F	F	F	G	N	F	G	G	F	F	F	N	G	G	G
Alcohols, aliphatic	E	E	E	E	E	E	G	E	G	G	G	G	E	E	G	G	G	F	N	E	E	E
Alcohols, aromatic	F	G	G	G	F	E	N	F	N	N	N	F	F	F	F	N	N	F	N	G	F	F
Alcohols	G	G	G	G	G	E	F	F	F	N	F	F	G	G	F	N	F	F	N	G	G	G
Aldehydes, aliphatic	G	G	G	G	G	G	G	E	G	G	G	G	G	G	F	N	N	F	F	F	G	G
Aldehydes, aromatic	N	F	G	E	E	G	N	G	F	N	F	G	N	F	N	N	N	N	N	F	F	F
Aldehydes	F	G	G	G	G	G	F	G	F	F	F	G	G	F	F	N	N	F	F	F	G	G
Ketones, aliphatic	F	F	F	G	G	G	N	G	F	N	N	G	G	F	N	N	N	N	N	F	N	N
Ketones, aromatic	N	N	F	N	N	E	N	G	F	N	N	E	N	N	N	N	N	N	N	F	F	F
Ketones	N	N	F	F	F	G	N	G	F	N	N	G	F	F	N	N	N	N	N	F	N	N
Esters, aliphatic	G	G	F	G	G	E	N	F	N	N	N	G	G	F	N	N	N	N	N	F	F	F
Esters, aromatic	G	G	E	G	G	G	F	F	F	F	N	G	N	F	N	N	N	F	F	F	F	F
Esters	G	G	G	G	G	G	N	F	N	N	N	G	F	F	N	N	N	N	N	F	F	F
Ethers, Aliphatic	N	F	F	N	N	G	F	G	F	N	N	G	N	E	N	N	N	N	N	F	F	F
Ethers, Aromatic	N	F	F	N	N	E	N	F	N	N	N	N	N	F	N	N	N	N	N	F	F	F
Ethers	N	F	F	N	N	G	N	F	N	N	N	F	N	G	N	N	N	N	N	F	F	F
Hydrocarbons	N	F	F	F	F	G	N	F	N	F	F	G	F	F	N	N	N	F	N	G	F	F
Hydrocarbons, aliphatic	F	G	G	G	G	E	G	E	G	G	G	G	G	G	F	F	N	G	G	E	G	G
Hydrocarbons, aromatic	N	N	N	N	N	E	N	F	N	N	N	E	N	F	N	N	N	N	N	E	F	F
Hydrocarbons, halogenated	N	N	N	F	N	G	N	F	N	N	N	G	N	F	N	N	N	N	N	E	F	F
Oils and Greases	F	G	G	G	G	E	F	G	F	G	G	G	G	E	G	G	G	G	F	G	E	E
Aqueous Solutions	E	E	E	E	E	E	E	E	E	E	E	G	E	E	E	G	E	E	E	G	E	E
Media & Sera	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	E	E
Dry Salts	E	E	E	E	E	E	G	E	G	G	E	G	E	E	E	G	E	E	G	E	E	E
Detergents/Surfactants	E	E	E	E	E	E	E	G	G	F	G	E	E	E	E	G	E	E	E	G	E	E
Overall Chemical Rating	F	G-	G-	G-	G-	G	F-	F+	F-	F-	F	F+	F	G-	F	F-	F-	F	F-	F+	G-	G-

**E** 30 days of constant exposure causes no damage. Plastic may even tolerate for years.

**G** Little or no damage after 30 days of constant exposure to the reagent.

**F** Some effect after 7 days of constant exposure to the reagent. Depending on the plastic, the effect may be crazing, cracking, loss of strength or discoloration. Solvents may cause softening, swelling and permeation losses with LDPE, HDPE, PP,PPCO and PMP. The solvent effects on these five resins are normally reversible; the part will usually return to its normal condition after evaporation.

**N** Not recommended for continuous use. Immediate damage may occur. Depending on the plastic, the effect will be a more severe crazing, cracking, loss of strength, discoloration, deformation, dissolution or permeation loss.

Except for oxidizing acids; for oxidizing acids, see "Oxidizing Agents, strong"

TPE gaskets

General Class of Chemical	Specialty Resins, continued		Fluoropolymers					Elastomers				PVC Tubing				Fluoropolymer Tubing		Other Tubing			
	Permanox®	Thermanox®	ECTFE	ETFE	FEP	PFA	TFE/PTFE	TPE	EPDM	EPR	Silicone	tPVC	PVC 180	PVC 380	PVC 980	FEP 890	PFA 870	Siliconet 50/65	PURS 280	LLDPE 489	PP 689
Acids, dilute or weak	E	G	E	E	E	E	E	G	G	E	F	G	G	G	G	E	E	G	G	E	E
Acids, strong or concentrated	E	F	E	E	E	E	E	F	F	G	N	F	F	F	F	E	E	F	N	G	G
Acids	E	F	E	E	E	E	E	F	F	G	N	F	F	F	F	E	E	F	N	G	G
Bases/Alkali, inorganic, dilute or weak	E	F	E	E	E	E	E	G	E	E	G	G	G	G	G	E	E	E	F	E	E
Bases/Alkali, inorganic, strong or concentrated	E	F	E	E	E	E	E	F	E	E	F	F	F	F	F	E	E	F	N	E	E
Bases/Alkali, inorganic	E	F	E	E	E	E	E	F	E	E	F	F	F	F	F	E	E	G	N	E	E
Amines, aliphatic	G	G	E	E	E	E	E	G	G	G	N	N	N	N	N	E	E	F	F	F	G
Amines, aromatic	G	F	F	E	E	E	E	N	G	G	N	N	N	N	N	E	E	N	N	E	G
Amines	G	G	G	E	E	E	E	F	G	G	N	N	N	N	N	E	E	N	N	F	G
Bases/Alkali, Organic/Inorganic	G	F	G	E	E	E	E	F	G	G	N	N	N	N	N	E	E	F	N	G	G
Oxidizing Agents	G	N	E	E	E	E	E	N	F	F	F	F	F	F	F	E	F	N	N	G	G
Oxidizing Agents, strong or concentrated	G	N	E	E	E	E	E	N	F	F	F	F	F	F	F	E	E	F	N	F	G
Oxidizing Agents, dilute or weak	G	F	E	E	E	E	E	F	F	F	G	F	F	F	F	E	E	G	N	G	G
Alcohols, aliphatic	E	G	E	E	E	E	E	E	E	G	G	F	F	F	F	E	E	G	N	E	E
Alcohols, aromatic	G	G	E	E	E	E	E	N	N	N	F	N	N	N	N	E	E	N	N	F	F
Alcohols	G	G	E	E	E	E	E	F	F	F	F	N	N	N	N	E	E	F	N	G	G
Aldehydes, aliphatic	G	E	E	E	E	E	E	G	E	E	F	N	N	N	N	E	E	F	N	G	G
Aldehydes, aromatic	E	E	E	E	E	E	E	N	N	F	F	N	N	N	N	E	E	N	N	G	E
Aldehydes	G	E	E	E	E	E	E	F	F	G	F	N	N	N	N	E	E	N	N	G	G
Ketones, aliphatic	F	G	G	G	E	E	E	N	G	G	N	N	N	N	N	E	E	N	N	G	G
Ketones, aromatic	F	G	E	E	E	E	E	N	G	G	F	N	N	N	N	E	E	N	N	N	N
Ketones	F	G	G	G	E	E	E	N	G	G	N	N	N	N	N	E	E	N	N	F	F
Esters, aliphatic	G	F	E	E	E	E	E	N	F	G	F	N	N	N	N	E	E	N	N	G	G
Esters, aromatic	E	F	G	E	E	E	E	N	N	N	N	N	N	N	N	E	E	N	N	G	G
Esters	G	F	G	E	E	E	E	N	N	F	N	N	N	N	N	E	E	N	N	G	G
Ethers, Aliphatic	F	G	E	E	E	E	E	N	N	N	N	N	N	N	N	E	E	N	N	N	N
Ethers, Aromatic	F	F	G	E	E	E	E	N	N	N	F	N	N	N	N	E	E	F	N	N	N
Ethers	F	F	G	E	E	E	E	N	N	N	N	N	N	N	N	E	E	N	N	N	N
Hydrocarbons	F	F	G	G	E	E	E	F	N	F	N	N	N	N	N	E	N	F	F	F	F
Hydrocarbons, aliphatic	G	E	E	E	E	E	E	F	G	F	F	F	F	F	F	E	E	F	E	G	G
Hydrocarbons, aromatic	N	F	E	G	E	E	E	N	N	G	N	N	N	N	N	E	E	N	N	F	F
Hydrocarbons, halogenated	N	N	G	E	E	E	E	F	N	F	N	N	N	N	N	E	E	N	N	N	N
Oils and Greases	G	G	E	E	E	E	E	F	N	F	F	F	F	F	F	E	E	G	E	G	G
Aqueous Solutions	E	E	E	E	E	E	E	G	E	E	E	G	G	G	G	E	E	E	F	E	E
Media & Sera	E	E	E	E	E	E	E	E	E	E	E	G	G	G	G	E	E	G	F	E	E
Dry Salts	E	E	E	E	E	E	E	G	E	E	G	G	G	G	G	E	E	G	G	E	E
Detergents/Surfactants	E	G	E	E	E	E	E	G	E	E	G	G	G	G	G	E	E	G	G	E	E
<b>Overall Chemical Rating</b>	<b>G</b>	<b>F+</b>	<b>E-</b>	<b>E</b>	<b>E</b>	<b>E</b>	<b>E</b>	<b>F-</b>	<b>F</b>	<b>F+</b>	<b>F-</b>	<b>F-</b>	<b>F-</b>	<b>F-</b>	<b>F-</b>	<b>E</b>	<b>E</b>	<b>F-</b>	<b>N</b>	<b>G-</b>	<b>G-</b>



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► **Notes**



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