LaMotte

Water Quality Testing Products

SOLVING ANALYTICAL CHALLENGES SINCE 1919

The Next Revolution in Water Analysis is Here!

See pages 36-37

See pages 34-35

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Since 1919

Helping people solve analytical challenges by providing innovative solutions through knowledgeable technical guidance, prompt service, and quality products designed for the analysis of water and soil.

TO ORDER - SEE BACK COVER

LaMotte Company manufactures its products at its 65,000 square foot facility in Chestertown, Maryland, near Washington, DC on the east coast of the United States.

Over 10 years into our **Lean Manufacturing** journey, LaMotte's chemists, engineers, and technicians continue to optimize a wide variety of processes to achieve maximum quality and efficiency.

We offer a wide range of test methods and tools for the analyst, from **multi-factor test strips**, foil-packaged **unit dose tablets**, **unit dose powder vials**, and **liquid reagents** to sonic-welded **color comparators**, **multi-parameter test kits**, and **electronic instruments**. LaMotte controls the manufacturing of all aspects to ensure the highest quality.

We believe strongly in having a **team of technical experts available by phone and email for customer support**. The **Research and Development team** works to constantly improve and create new test methods. Our **in-house graphic design department** provides extensive services that are especially valuable for the many custom designed products that LaMotte welcomes.

All of these varied capabilities enable LaMotte to excel at helping people solve their analytical challenges.

Custom Test Kit Services

If your needs go beyond our standard product line, then our Custom Test Kit Services Department can design a custom kit to meet your needs.

WE CAN design a kit that combines any grouping of parameters you need.

WE CAN develop new test methods for new proprietary compounds or for control of specialized treatment programs

WE CAN alter existing graphics and packaging or design something new for private labeling purposes

How The Custom Test Kit Service Works

1. Contact our Customer Service or International Sales departments by phone, fax, or email. Tell us how you plan to use the product, the level of accuracy and range you need, how many kits, and any limitations such as size, weight, cost, or skill level of the end user (i.e. student, consumer, technician).
2. We will prepare a quote for you. Based on the information you provide, we will suggest one of our non-catalog test kits or develop a kit to suit your needs.
3. Once you order, we immediately begin the development process, subject to final approval before beginning production.

International Sales

Worldwide Distributor Network

Available online at www.lamotte.com:

- Entire Product Listing with Full Descriptions
- Printable Test Instructions
- Printable MSDSs
- Printable Reagents Certificates of Analysis

For Pricing and To Order, contact a distributor near you.

To locate a LaMotte distributor, visit www.lamotte.com and select "INTERNATIONAL". For more information email us at **intl@lamotte.com**.

lamotte.com

Colorimetric

See Methods Videos IN OPERATION!

Colorimetric

There are two basic types of colorimetric tests:

1. Tests which determine the concentration of a substance are based on Beer's Law. Simply stated, this says that the higher the concentration of a substance, the darker the color developed in the test, so more light is absorbed by the sample.
2. pH tests use an indicator which changes color with changes in the concentration of hydrogen ions, or the acidity of the solution.

Octa-Slide 2 Comparator

The Octa-Slide 2 replaces the Octet and Octa-Slide comparators. All 8 color standards can be viewed at once against a precision matched color bar top-loaded next to the sample tube. This comparator system can be used with existing reagent system but is not compatible with color bars from the original Octa-Slide.

LRC Comparator

This innovative design replaces the Axial Reader with a simpler and significantly improved optical system. Simply place one reacted sample in the front and one un-reacted sample behind it and let the light shine down into both tubes. Precision matched glass ampoules are in the slide bar so even the most sensitive low range colors can be matched one-on-one with extraordinary ease and confidence.

Test Strips

Test strips are either dipped or swirled in test solutions. The resulting color reaction is compared to a color chart provided.

Color Chart Comparator

Color charts are laminated color standards. The reacted sample is held against the panel and compared to the color standards.

Electronic Methods

Electronic colorimeters measure the amount of light which travels through the reacted sample, and convert the measurement to a reading as ppm, absorbance or %T. In addition to colorimeters, LaMotte offers instruments to test pH, TDS/conductivity, dissolved oxygen, and turbidity.

Titrimetric

Titrimetric tests can be used to determine the concentration of a substance in a sample solution. After the sample is treated with an indicator, a standard titrant is added until a color change indicates a completed reaction. LaMotte offers four separate types of titration methods, allowing a choice of precision and convenience.

Direct Reading Titrator

The Direct Reading Titrator is a 1.0 mL microburet calibrated to allow direct reading of the test result. Each Titrator has a specific range, but may be refilled to test higher concentrations.

Dropper Pipet

The drop count test uses a pipet to provide fast, reliable measurements in the field. The number of drops used to obtain a color change is multiplied by a given factor to produce the test result.

Automatic Buret

The self-zeroing automatic buret is calibrated from 0 to 10 mL in 0.1 mL increments. It is available with a squeeze valve (pinchcock), glass stopcock, or Teflon® stopcock. *See page 85 for full line of automatic burets.*

Dropper Bottle

The dropper bottle test uses bottle tips which deliver a consistent standard drop size to add titrant to the sample. As with the drop count test, the number of drops used to complete the reaction is multiplied by a given equivalence factor to determine the concentration. Many dropper bottle tests use different sample sizes for different equivalences.

SMART3 Colorimeter

IP67 WATERPROOF

2 YEAR WARRANTY

CE

Code 1910

Over 80 Pre-Programmed Tests

The user-friendly SMART3 Colorimeter is the ideal direct reading colorimeter for complete on-site water analyses.

All pre-programmed tests can be run on these compact instruments and each test features automatic wavelength selection. The entire multi-LED optical system is embedded in the light chamber and optimized for LaMotte test reagent systems. The analyst can simply select the test and put in the sample with reagent. The microprocessor, which selects the wavelength, also allows the user to load up to 25 tests for analyzing custom reagent systems. LaMotte stands behind every system we provide.

These portable colorimeters have the user in mind with these advanced features:

- IP67 Waterproof
- Simple, menu-driven operation
- Alphabetical test selection
- User-selected test sequences
- Self diagnostics with error/warning messages
- Instant readiness without "count down" delays; achieved by active stabilization of lamp intensity
- Auto-blank; Auto-off
- European CE mark

The user may select any of the wavelengths in each meter to determine the absorbance or %T of a sample at the desired wavelength.

Additional advancements include:

- Superior narrow band-width interference filters
- New LCD display for improved readability
- USB interface
- Optional software for data storage and manipulation
- Lithium ion rechargeable battery, USB computer adapter is included

As well as the incorporated features:

- All wavelength filters - 428, 525, 568, 635 nm (SMART3 only)
- USB port
- and more...

* SMART 3 Turbidity is not the same as EPA 180.1 Turbidity

See pages 17-18 for complete reagent system listing.

Range:	0-125%T
Resolution:	1% FS
Accuracy:	2% FS
CE Mark:	Yes
Light Source:	LED/Filter setup; 428nm, 525nm, 568nm, 638nm
Detector:	Photodiode
Display:	160x100 Backlight LCD, 20x4 line graphics display
Sample Cell:	25 mm round cell, 10 mm square cuvette, 16 mm COD tubes
Datalogging:	Up to 500 data points, USB transfer, time and date stamped
Keypad:	6-button mechanical
Calibration:	Factory set - user adjustable
Power:	USB computer/power charger or Lithium Ion rechargeable battery, 3.7V, 2.5" x 0.75", 1.7 oz.
Dimensions:	19.05 x 8.84 x 6.35 cm; 7.5 x 3.5 x 2.5 inches
Weight:	15 ounces
Bandwidth:	10 mm typical

SMART3 · Code 1910

Comes with 6 sample tubes, power charger and manual

Accessories/Replacement Items:

Smartcheck Standards	**Code 4148**
Replacement Sample Chamber Cup	**Code 3-0038**
COD/UDV adapter	**Code 1724**
6 sample tubes	**Code 0290-6**
USB Cable	**Code 1720**
USB Power Plug	**Code 1721**
Car Charger	**Code 5-0132**
Small Case	**Code 1910-GCS150**
Large Case	**Code 1910-GCS440**

SMARTLink 3 Program

Order Code 1901-CD

Interface the SMART3, 2020w and LTC-3000w meters with a Windows-based personal computer. The program can be used to download data stored in the dataloggers of these meters. The program allows the user to identify, organize, view, manipulate and store data as a database on a PC. Data can also be copied and pasted or exported to other applications as a CSV file.

2020w Portable Turbidity Meters

Industry-leading precision, sensitivity, and dependability in one of the most innovative WATERPROOF, handheld meters available on the market!

IP67 WATERPROOF | EPA 180.1 | ISO 7027 | 2 YEAR WARRANTY | CE

Waterproof to IP67

Lithium rechargeable batteries

USB port

7 languages

Backlit display

EPA and ISO versions

The multi-detector optical configuration assures long term stability and minimizes stray light and color interferences. All readings are determined by the process of signal averaging over a 5 second period. This minimizes fluctuations in readings attributed to large particles and results in rapid, highly repeatable measurements. Ideally suited for both low-level drinking water applications as well as monitoring high turbidity in the field.

- Seven user selected languages – English, Spanish, French, Japanese, Chinese, Italian, and Portuguese
- Advanced calibration algorithms
- Best for low range turbidity analysis
- Easy menu driven operation and large LCD display
- 500 point data log; stored results can be viewed directly on instrument or downloaded to a computer via USB cable and SmartLink 3 software (available separately)

2020we version meets ***US EPA design*** criteria as specified by EPA 180.1, Rev. 2.0 (1993) and Standard Methods 2130 B-2001.

2020wi version meets design criteria for quantitative methods of turbidity using optical turbidimeters as specified by ***ISO 7027. Best for colored or extremely turbid samples.***

Kits are supplied with 0, 1, and 10 NTU standard, sample bottle, four sample tubes, USB cable and wall adapter.

To Order:

2020we Kit · Portable turbidity meter complies with by EPA 180.1, Rev. 2.0 (1993) and Standard Methods 2130 B-2001
Order Code 1970-EPA

2020wi Kit · Portable turbidity meter complies with ISO 7027 Standard
Order Code 1970-ISO

Kits are supplied with 0, 1, and 10 NTU/FNU standards, sample bottle, six sample tubes, USB cable and wall adapter—all in a sturdy carrying case.

Accessories:

- 0 NTU/FNU Standard (EPA and ISO), 60 mL; Code 1480
- 1 NTU/FNU Standard (EPA and ISO), 60 mL; Code 1453
- 10 NTU/FNU Standard (EPA and ISO), 60 mL; Code 1454
- 100 NTU Standard (ISO), 60 mL; Code 1455
- 1 NTU Standard (EPA), 60 mL; Code 1450
- 10 NTU Standard (EPA), 60 mL; Code 1451
- 100 NTU Standard (EPA), 60 mL; Code 1452
- Formazin Standard Solution, 4000 NTU, 60 mL; Code 6195-H
- USB Cable, Code 1720
- Wall Adapter, Code 1721
- SMARTLink 3 Software; Code 1901-CD
- Six-pack of vials; Code 0290-6
- Car Charger; Code 5-0132
- Chamber Cup; Code 3-0038

Turbidity Specifications:

Unit of Measure 2020we	NTU, AU, ASBC, EBC
Units of Measure 2020wi	FNU, FAU, ASBC, EBC
Range*	0-4000 NTU/FNU, 0-10,500 ASBC, 0-150 EBC
Resolution*	0.01 NTU/FNU 0.00-10.99 0.1 NTU/FNU 11.0-109.9 1 NTU/FNU 110-4000
Accuracy*	From 0-2.5 NTU the accuracy is ±0.05 NTU. From 2.5-100 NTU the accuracy is ±2%. Above 100 NTU the accuracy is ±3%.
Detection Limit	0.05 NTU/FNU
Range Selection	Automatic
Reproducibility*	0.02 NTU/FNU or 1%
Light Source	Tungsten (EPA), complies with EPA 180.1, Rev. 2.0 (1993) and Standard Methods 2130 B-2001; 860nm LED (ISO), complies with ISO 7027

***Over 600 NTU/FNU units expressed as AU/FAU**

Meter Features:

Signal Averaging	Disabled, 2, 5, 10
Power	USB computer cable, wall adapter or Lithium ion rechargeable battery, 3.7V, 2.5" x .75", 1.7 oz
AC Power	Optional
Data Logging	500 points
Auto Shut-Off	Disabled, 5, 10, 30 seconds
Optional Software	SmartLink 3
Languages	English, French, Spanish, Japanese, Italian, Portuguese, Chinese
Response Time	<2 Seconds
Size	7.5 x 3.5 x 2.5 inches; 19.05 x 8.84 x 6.35 cm
Weight	13 ounces
Display	6-line LCD with backlit display

LTC-3000w Turbidity, Chlorine & Color Laboratory Meter

EPA 180.1

2 YEAR WARRANTY

ISO 7027

USEPA COMPLIANT

LTC-3000we (EPA version); Code 1972-EPA
LTC-3000wi (ISO version) Code 1972-ISO

Kits supplied with 0, 1 and 10 NTU standards, 6 sample tubes, DPD tablets, USB cable and AC adapter.

The LTC-3000we uses a tungsten lamp and meets the specifications of EPA 180.1.

Industry leading precision, sensitivity and dependability in one of the most innovative meters available on the market for the measurement of Turbidity, Chlorine and Color.

The LTC3000w is a benchtop turbidity, chlorine and color meter with wide range and high accuracy. **ISO unit also available.** The meter meets EPA 180.1, Rev. 2.0 (1993) and Standard Methods 2130 B-2001 for turbidity and Standards Methods 4500-Cl G for chlorine. The turbidity range is 0-4,000 NTU with a MDL of 0.05 NTU. The free and total chlorine range is 0-10 ppm with a MDL of 0.03 ppm. The meter can store 500 data points which can be downloaded to a computer, allows 7 different languages, and runs on rechargeable batteries or a USB computer/wall adapter.

- Ideally suited for both low-level drinking water applications as well as monitoring high turbidity
- Special focusing optics
- Supports 7 languages: English, French, Spanish, Chinese, Japanese, Portuguese and Italian
- Data logging up to 500 points with a date and time stamp – stored tests can be viewed on the meter or downloaded to a PC
- Compatibility with existing SmartLink 3 software
- Easy to read graphic LCD display
- Easy menu-driven operation

Meter Features

Signal Average	Disabled, 2, 5, 10
Power	USB computer cable, wall adapter or Lithium ion rechargeable battery, 3.7V, 2.5" x 0.75", 1.7 oz
Data Logging	500 points
Auto Shut-Off	Disabled, 5, 10, 30
Languages	English, French, Spanish, Japanese, Italian, Portuguese, Chinese
Response Time	<2 Seconds
Dimensions	8.75 W x 7.75 D x 3 H inches 22.2 W x 19.7 D x 7.6 H cm

Kits & Accessories

LTC-3000we US EPA Compliant, Order Code 1972-EPA, Turbidity (EPA 180.1, Rev. 2.0 (1993) and Standard Methods 2130 B-2001), Chlorine (Standard Methods 4500-Cl G), Color (based on Standard Methods 2120 C)

LTC-3000wi ISO Compliant, Order Code 1972-ISO, Turbidity (ISO 7027), Chlorine (Standard Methods 4500-Cl G), Color (based on Standard Methods 2120 C)

0290-6	Six pack of tubes
1480	0 NTU/FNU Standard (EPA and ISO), 60 mL
1450	1 NTU Standard (EPA), 60 mL
1451	10 NTU Standard (EPA), 60 mL
1452	100 NTU Standard (EPA), 60 mL
1453	1 FNU Standard (ISO), 60 mL
1454	10 FNU Standard (ISO), 60 mL
1455	100 FNU Standard (ISO), 60 mL
6903A-J	Chlorine DPD #1 Tablets, 100
6197A-J	Chlorine DPD #3 Tablets, 100
1901-CD	SMARTLink3 Software
6195-H	Formazin standard solution, 4000 NTU, 60 mL
4140-02	DPD Chlorine secondary standards kit
3176-02	FAS-DPD Titration kit for chlorine titration
6973-H	Standard chlorine solution, 250 ppm, 60 mL
6973-L	Standard chlorine solution, 250 ppm, 475 mL
3858-H	Permanganate solution, 1000 ppm, 60 mL

Turbidity

- Meets design criteria for quantitative methods of turbidity using optical turbidimeters as specified by EPA 180.1, Rev. 2.0 (1993) and Standard Methods 2130 B-2001
- Two user selected factory calibration modes:
  - Formazin
  - Polystyrene Japanese Turbidity Unit (Japanese Water Works Regulation)
- Supplied with formazin verified styrene divinylbenzene bead suspensions (AMCO) for easy and accurate field calibration
- User selected signal averaging (disabled, 2, 5 or 10 measurements)
- Blanking with turbidity-free water allows a zero point calibration for increased accuracy at very low turbidity levels

Unit of Measure	NTU, FNU, AU, FAU, ASBC, EBC
Range*	0-4000, 0-10,500 ASBC, 0-150 EBC
Resolution*	0.01 NTU/FNU 0.00-10.99; 0.1 NTU/FNU 11.0-109.9; 1 NTU/FNU 110-4000
Range Selection	Automatic
Accuracy*	From 0-2.5 NTU/FNU the accuracy is ±0.05 NTU/FNU. From 2.5-100 NTU/FNU the accuracy is ±2%. Above 100 NTU/FNU the accuracy is ±3%.
Detection Limit	0.05 NTU/FNU
Reproducibility*	0.02 NTU/FNU, or 1%
Stray Light	<0.02 NTU FNU
Light Source	Tungsten (EPA), complies with EPA 180.1, Rev. 2.0 (1993) and Standard Methods 2130 B-2001, 860mm LED (ISO), complies with ISO 7027
Signal Averaging	Disabled, 2, 5, 10

*Over 600 NTU/FNU units expressed as AU/FAU

Chlorine

- Exceeds design specifications for Standard Methods 4500-Cl G
- Liquid and tablet DPD calibrations for Free and Total Chlorine measurement
- Wide-range accomplished with same cell and reagent dosage
- Low level detection.
- User selected units ppm or mg/L

Range	0-10 ppm, Free and Total Chlorine
Resolution	0.00-5.00 ppm Range: 0.01 ppm; 5.0-10.0 ppm Range: 0.1 ppm
Accuracy	Tablet: 0-1.0 ppm Range: ±0.03 ppm 1.0-3.0 ppm Range: ±0.06 ppm 3.0-6.0 ppm Range: ±0.3 ppm 6.0-10.0 ppm Range: ±2.5 ppm Liquid: 0-0.5 ppm Range: ±0.03 ppm 0.6-3.0 ppm Range: ±0.06 ppm 3.0-6.0 ppm Range: ±0.4 ppm 6.0-10.0 ppm Range: ±1.5 ppm
Detection Limit	0.03 ppm
Response Time	<5 Seconds
Light Source	525 nm LED, complies with Standard Methods 4500-Cl G

Color

- Uses Platinum-Cobalt method from Standard Methods 110.2
- Wavelength 428 nm

Range	0-1000 cu
Detection Limit	20 cu
Accuracy	±15 cu
Light Source	428 LED

SMART® Spectro Spectrophotometer

A spectrophotometer that is easy to use and more accurate than anything in its price range. With automatic wavelength selection, pre-programmed tests, and superior performance—this is the best spectrophotometer for the money!

Menu Driven Display

Tests and functions are selected from scrolling menus for ultimate simplicity. Results are displayed as %T, absorbance, and concentration.

Pre-Programmed Tests, User Tests & Automatic Wavelength Selection

Over 80 pre-programmed tests. Up to 25 calibrations for additional tests can be entered into the memory. The user can also customize sequences for frequently run tests. The meter automatically moves the grating to the required wavelength.

To Order:

Order Code 2000-01 (120V/60Hz and 220V/50Hz)

Includes 6 sample cells (25mm round), 2 sample cell holders (25mm round and COD, 10mm cuvettes), power supply, battery charger, and diagrammed manual.

Options:

- Carrying Case, Code 2000-CS
- Battery Pack with holder (rechargeable), Code 2000-BP
- SMARTLink 3 Software with cable, Code 1901-CD
- Replacement sample cells (round), Code 0290-6
- Cuvettes, Code 29653-10

See pages 17-18 for complete reagent system listing.

Wavelength Range:	350-1000 nm
Wavelength Accuracy:	±2 nm
Wavelength Resolution:	1 nm
Wavelength Bandwidth:	5 nm (max)
Photometric Range:	0-125%T, -0.1-2.5A
Photometric Accuracy:	±0.005A
Photometric Noise:	<0.001A at 0A; <0.002A at 2A
Photometric Drift:	±0.002A/hr @500 nm
Photometric Stray Light:	<0.5 %T
Dispersive Device:	Grating - based system
Optical Mount:	Modified Ebert
Grating:	1200 grooves/mm ruled grating
Light Source:	Quartz halogen
Bulb Life:	1000 hours minimum
Sample Chambers:	25 mm round cell, 10 mm square cuvette UDV, COD
Detector:	Silicon photodiode
Temperature Range:	0-40°C
Modes:	Conc., %T, ABS
Pre-Programmed Tests:	Yes
Wavelength Selection:	Automatic
User Tests:	Yes, up to 25 can be entered and edited
Datalogging:	Yes, RS-232, datalogs 500 tests
Diagnostics:	Yes
Power:	110/220 volt or battery pack (rechargeable)
Weight:	4.65 kgs (10.3 lbs)
Size (WxDxH:)	35 cm x 28 cm x 17 cm

Digestion Tubes for Total Nitrogen and Total Phosphorus

LaMotte offers low and high Total Phosphorus and a Total Nitrogen test that are reacted in a heater block and are then tested using a colorimeter or spectrophotometer.

Code	Description	Range	# of Tests
4024-01	Low Total Phosphorus	0-3.5 mg/L	25
4025-01	High Total Phosphorus	0-100 mg/L	25
4026-01	Total Nitrogen	0-25 mg/L	25

Multi-Range COD Reagent Systems

LaMotte-manufactured Chemical Oxygen Demand reagent systems used with our SMART3 Colorimeter or SMART Spectro Spectrophotometer are an easy and precise way to measure critical COD levels. Measure low, medium or high levels of COD using your choice of mercury (US EPA approved method) or non-mercury reagent systems. Each package contains 25 ready to use vials. All kits ship as R1.

Mercury based systems

Code	Range
0075-SC	0-150 ppm (EPA approved)
0076-SC	0-1500 ppm (EPA approved)
0077-SC	0-15,000 ppm

Mercury-free systems

Code	Range
0072-SC	0-150 ppm
0073-SC	0-1500 ppm
0074-SC	0-15,000 ppm

COD Heater Block

Code 5-0102 (120V), 12-tube capacity

Code 5-0102-EX2 (230V), 12-tube capacity

This COD heater block features digital microprocessor control, programmable time and temperature settings, and a dual LED display to monitor both temperature and timer. Perfect for COD, Total Phosphorus, and Total Nitrogen testing PLUS other tests requiring digestion.

Temperature:	30-200°C
Timer:	0-999 minutes
Vial Capacity:	12 (16 mm tubes)
Stability:	±0.1°C@100°C
Weight:	3.6 kg
Dimensions	310 x 250 x 80mm (LxWxH)
CE Mark:	Yes
Oven Temp Cutoff:	212°C

UV/VIS Spectrophotometer

80+ Test Factors including:

ALUMINUM
AMMONIA
CADMIUM
CHROMIUM
COBALT
COD LR
COD HR
COPPER
CYANIDE
FLUORIDE
IRON
LEAD
MANGANESE LR
MANGANESE HR
NICKEL
NITRATE
NITRITE
PHENOL
PHOSPHATE
SULFATE
ZINC

The UV-Vis Spectrophotometer is an expandable, easy-to-use instrument that provides maximum performance in a compact, benchtop package. The instrument includes a high precision optical bench, full programming capabilities, customizable standard curves, and over 80 preprogrammed tests. Available options include a variety of sample holders as well as software-based wavelength scanning and kinetics.

Order Code 7-2000-UV

- Programmable wide range spectrophotometer can accept up to 200 user curves in memory
- Pre-programmed to analyze selected tests on a direct-reading digital display
- Advanced key pad with 22 buttons simplifies data entry
- Includes one 10 mm quartz glass cuvette, six round 25 mm 10 mL test vials, universal sample holder and square sample holder

Wavelength Range	190-1100nm
Wavelength Accuracy	±2nm
Wavelength Repeatability	±1nm
Bandwidth	4nm
Optical System	Single beam, grating 1200 lines/nm
Photometric Accuracy	±0.004 A at 0.5 A
Communication Ports	USB, RS-232
Power Requirements	100-220V
Instrument Weight & Size	14kg (31 lbs.), 73x60x34cm (26x21x15")
Shipping Weights & Size	17.5kg (39 lbs.), 104x82x60cm (26x21x15")

New tests are being developed for the SMART 3. Please contact our Technical Service Department for information regarding additions.

Test Factor	Test Method (# of reagents)	SMART 3 Range†	Spectro / UV-VIS Range†	# Tests	Code	Ship
Alkalinity UDV	Unit Dose Vial (1)	10-250	15-200	100	4318-J	NH
Aluminum	Eriochrome Cyanine R (4)	0.01-0.30	0.01-0.30	50	3641-01-SC	NH
Ammonia Nitrogen LR, Fresh	Salicylate (3)	0.05-1.00	0.02-1.00	25	3659-01-SC	R2
Ammonia Nitrogen LR, Salt	Salicylate (3)	0.10-1.00	0.10-1.00	25	3659-01-SC	R2
Ammonia Nitrogen HR	Nesslerization (2)	0.05-4.00	0.05-4.00	50	3642-SC	R1
Barium	Barium Chloride (1)	5-200	—	50	3638-SC	NH
Benzotriazole**	UV Photolysis (3)	0.5-30.0	—	50	4047-01	R1
Biguanide	Colorimetric (1)	2-70	5-70	50	4044	NH
Borate UDV	Unit Dose Vial (1)	5-80	—	100	4322-J	NH
Boron	Azomethine-H (2)	0.05-0.80	0.05-0.80	50	4868-01	NH
Bromine LR	DPD Tablets (2)	0.10-9.00	0.04-9.00	100	3643-SC	NH
Bromine UDV	Unit Dose Vial DPD (1)	0.1-22.0	0.3-22.0	100	4311-J	NH
Cadmium	PAN (4)	0.02-1.00	0.02-1.00	50	4017-01	R1
Carbohydrazide	Iron Reduction (3)	0.04-0.900	0.005-0.900	100	4857	R1
Chloride TesTab	Argentometric (1)	0.4-30.0	0.5-30.0	50	3693-SC	NH
Chlorine (Free & Total)	DPD Tablets (3)	0.03-4.00	0.02-4.00	100	3643-SC	NH
Chlorine - Free UDV	Unit Dose Vial (1)	0.10-10.00	0.10-10.00	100	4311-J	NH
Chlorine - Liquid DPD	DPD (3)	0.03-4.00	0.30-4.00	144	4859	R1
Chlorine - Total UDV	Unit Dose Vial (1)	0.10-10.00	0.1-10.0	100	4312-J	NH
Chlorine Dioxide	DPD Tablet/Glycine (2)	0.06-8.00	0.04-7.00	50	3644-SC	NH
Chromium Hexavalent	Diphenylcarbohydrazide (1)	0.01-1.00	0.01-1.00	50	3645-SC	HA
Chromium (Total, Hex & Trivalent)	Diphenylcarbohydrazide (5)	0.01-1.00	0.03-1.00	50	3698-SC	HF
Cobalt	PAN (3)	0.04-2.00	0.02-2.00	50	4851-01	LQ
COD LR w/ Mercury*	Digestion (1)	5-150 mg/L	5-150 mg/L	25	0075-SC	R1
COD LR w/o Mercury*	Digestion (1)	5-150 mg/L	5-150 mg/L	25	0072-SC	R1
COD SR w/ Mercury*	Digestion (1)	50-1,500 mg/L	50-1,500 mg/L	25	0076-SC	R1
COD SR w/o Mercury*	Digestion (1)	50-1,500 mg/L	500-1,500 mg/L	25	0073-SC	R1
COD HR w/ Mercury*	Digestion (1)	500-15,000 mg/L	500-15,000 mg/L	25	0077-SC	R1
COD HR w/o Mercury*	Digestion (1)	500-15,000 mg/L	50-15,000 mg/L	25	0074-SC	R1
Color	Platinum Cobalt (0)	20-1,000	15-1,000	∞	NA	NH
Copper, BCA	Bicinchoninic Acid (1)	0.04-3.50	0.05-3.50	50	3640-SC	NH
Copper, Cuprizone	Cuprizone (2)	0.03-2.00	0.01-2.00	50	4023	R1
Copper, DDC	Diethyldithiocarbamate (1)	0.10-6.00	0.05-6.00	50	3646-SC	NH
Copper UDV	Unit Dose Vial, Bicinchoninic Acid (1)	0.1-4.0	0.20-4.00	100	4314-J	NH
Cyanide	Pyridine-Barbituric Acid (5)	0.03-0.35	0.05-0.50	50	3660-01-SC	R1
Cyanuric Acid	Melamine (1)	10-200	16-200	100	3661-01-SC	R1
Cyanuric Acid UDV	Unit Dose Vial, Melamine (1)	10-150	5-150	100	4313-J	NH
DEHA	Iron Reduction (3)	0.01-0.70	0.005-0.700	100	4857	NH
Dissolved Oxygen (DO)	Winkler Colorimetric (3)	0.6-11.0	0.3-12.0	100	3688-SC	R1
Erythorbic Acid	Iron Reduction (3)	0.02-3.00	0.02-3.00	100	4857	R1
Fluoride	SPADNS (2)	0.1-2.0	0.1-2.0	50	3647-02-SC	R1
Hardness (Total) UDV	UDV (1)	10-500	10-500	100	4309-J	NH
Hydrazine	P-dimethylaminobenzaldehyde (2)	0.01-1.00	0.010-0.750	50	3656-01-SC	R2
Hydrogen Peroxide LR	DPD (2)	0.02-1.50	0.02-1.50	100	3662-SC	NH
Hydrogen Peroxide HR	DPD (2)	1-60	1-60	50	4045-01	NH

†As ppm except as otherwise indicated *Requires COD Adapter Code 5-0087 and Heater Block
**UV lamp 31041-1; UV lamp power source 31041-2; UV safety goggles 31041

Continue next page...

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees

Instrument Reagent Listing

Test Factor	Test Method (# of reagents)	SMART 3 Range†	Spectro / UV-VIS Range†	# Tests	Code	Ship
Hydrogen Peroxide Shock	DPD (2)	10-225	4-225	100	4045-01	NH
Hydroquinone	Iron Reduction (3)	0.01-2.00	0.01-1.80	100	4857	R1
Iodine	DPD Tablets (2)	0.2-14.0	0.08-14.00	100	3643-SC	NH
Iron	Bipyridyl (2)	0.10-6.00	0.06-6.00	50	3648-SC	R1
Iron UDV	Unit Dose Vial, Bipyridyl (1)	0.1-10.0	0.07-10.00	100	4315-J	NH
Iron, Phenanthroline	1,10 Phenanthroline (2)	0.1-5.0	0.04-4.50	50	3668-SC	R1
Lead	PAR (5)	0.1-5.0	0.1-5.0	50	4031-01	R1
Manganese LR	PAN (3)	0.01-0.70	0.02-0.70	50	3658-01-SC	HF
Manganese HR	Periodate (2)	0.3-15.0	0.3-15.0	50	3669-SC	R1
Mercury	TMK (3)	0.01-1.50	0.02-1.50	50	4861-01	LQ
Methylethylketoxime	Iron Reduction (3)	0.01-3.00	0.02-3.00	100	4857	R1
Molybdenum HR	Thioglycolate (3)	0.6-50.0	0.2-15.0	50	3699-03-SC	R1
Nickel	Dimethylglyoxime (6)	0.15-8.00	0.06-8.00	50	3663-01-SC	LQ
Nitrate Nitrogen LR	Cadmium Reduction (2)	0.10-3.00	0.05-3.00	20	3649-SC	R1
Nitrate TesTabs	Zinc Reduction (1)	5-60	3-60	50	3689-SC	NH
Nitrate UDV	Unit Dose Vial, Zinc Reduction	2-80	—	100	4321-J	NH
Nitrite Nitrogen LR	Diazotization (2)	0.02-0.80	0.020-0.800	20	3650-SC	NH
Nitrogen, Total*	Chromotropic Acid/Digestion (6)	3-25 mg/L	2-25 mg/L	25	4026-01	R1
Oxygen Scavengers	Iron Reduction (3)	various	various	100	4857	R1
Ozone	DPD (3)	0.03-3.00	—	100	4881	R1
Ozone LR	Indigo Trisulfonate (3)	0.01-0.40	0.02-0.40	100	3651-SC	NH
Ozone HR	Indigo Trisulfonate (3)	0.05-2.50	0.05-1.50	20	3651-SC	NH
pH, CPR	Chlorophenol Red (3)	5.0-6.8 pH	5.0-7.0 pH	100	3700-01-SC	NH
pH, PR	Phenol Red (3)	6.6-8.4 pH	6.8-8.4 pH	100	3700-01-SC	NH
pH, TB	Thymol Blue (3)	8.0-9.5 pH	8.0-9.5 pH	100	3700-01-SC	NH
Phenol	Aminoantipyrine (3)	0.05-6.00	0.05-6.00	50	3652-01-SC	NH
Phosphate LR	Ascorbic Acid Reduction (2)	0.05-3.00	0.04-3.00	50	3653-SC	R2
Phosphate HR	Vanadomolybdophosphoric Acid (1)	0.5-70.0	1.0-70.0	50	3655-SC	R1
Phosphate, ppb	Ascorbic Acid/Digestion (2)	50-3000 ppb	—	50	3653-SC	R2
Phosphorus, Total - LR*	Ascorbic Acid/Digestion (5)	0.50-3.50 mg/L	0.07-3.50 mg/L	25	4024-01	R1
Phosphorus, Total - HR*	Molybdovanadate/Digestion (5)	5-100 mg/L	5.0-100.0 mg/L	25	4025-01	R1
Potassium	Tetraphenylboron (2)	0.8-10.0	0.5-10.0	100	3639-SC	R1
Silica LR	Heteropoly Blue (4)	0.05-4.00	0.03-2.50	100	3664-SC	R1
Silica HR	Silicomolybdate (3)	1-75	1-50	50	3687-SC	R1
Sulfate HR	Barium Chloride (1)	3-100	5-100	100	3665-SC	R1
Sulfide LR	Methylene Blue (3)	0.06-1.50	0.02-1.00	50	3654-02-SC	R1
Surfactants	Bromphenol Blue (3)	0.5-8.0	0.5-8.0	100	4876-01	LQ
Tannin	Tungsto-Molybdophosphoric Acid (3)	0.1-10.0	0.2-10.0	50	3666-01-SC	R1
Tolyltriazole**	UV Oxidation/Dichromate (3)	0.5-30.0	—	50	4047-01	R1
Turbidity	Absorptimetric (0)	3-400 FAU	2-400 FTU	∞	NA	NH
Zinc LR	Zincon (6)	0.05-3.00	0.03-3.00	50	3667-01-SC	LQ

† As ppm except as otherwise indicated * Requires COD Adapter Code 5-0087 and Heater Block
** UV lamp 31041-1; UV lamp power source 31041-2; UV safety goggles 31041

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees

Model 1200 · Single Test Colorimeter Labs

The 1200 Series of single test, direct reading colorimeters incorporates design advances that enhance reliability, improve accuracy, and simplify the calibration process, all in a portable, hand-held package.

Instrument Type:	Single wavelength, direct-reading colorimeter
Readout:	3½ digit LCD
Photometric Accuracy:	±0.001 Absorbance Unit
Detector:	Silicon Photodiode
Sample Chamber:	Accepts 25mm diameter flat-bottom, screwcap tubes (6 included)
Light Source:	LED
Interface:	RS-232 serial interface
Power:	Alkaline 9-volt DC battery, 3.5 mm jack for optional AC adapter
Size (LxWxH):	15 x 8 x 5.5 cm, 6 x 3.25 x 2.5 inches, 152 x 83 x 64 mm

Options:

RS-232 Cable (Order Code 1772)
AC Adapter 110/220V (Order Code 1754)
Replacement Tubes (Order Code 0290-6)

AUTO-ZERO

Simply insert the sample blank and press the zero key.

HINGED LIGHT COVER

Flip-top lid over sample chamber prevents any stray light, especially in the field, and avoids misplacing separate light caps.

IMPROVED ACCURACY

The microprocessor enables the factory programmed calibrations to optimally match non-linear curves.

EUROPEAN CE MARK

The 1200 has been independently tested and has earned the European CE Mark of compliance for electromagnetic compatibility and safety.

WATER RESISTANT DESIGN

Designed with excessive exposure to moisture in mind, the 1200 colorimeters deliver trouble-free performace in the field and lab.

EPA COMPLIANT

Employing the proper wavelength and the DPD test method, the 1200 Chlorine Colorimeter Kit meets or exceeds EPA design specifications for NPDWR and NPDES chlorine monitoring programs (EPA 330.5 and Standard Methods 4500-Cl G).

A GREAT VALUE!

Complete, economical package! The 1200 Chlorine Colorimeter Kit comes with enough tablets for 100 tests or liquid reagents for 140 tests, six sample vials with screw caps, instruction manual, and sturdy coloring case.

FIELD & LAB USE

An optional AC adapter is available to save battery life when in the laboratory.

0-4 PPM CHLORINE

No need to select a low or high range. The 1200 covers the entire critical chlorine range of 0-4 ppm with a 0.05 sensitivity.

RS-232 INTERFACE

An RS-232 port is provided to interface with a datalogger or computer. Optional cable available.

LARGE DISPLAY

The large 3½ digit display presents measurements in absorbance, and indicates low battery warnings.

Model 1200 · Single Test Colorimeter Labs

Test Factor	Code	Model	Range (ppm)	Detection Limit	Test Method (# of reagents)	# of Tests	Ship Codes
Ammonia Nitrogen	3680-01	DC1200-NH	0–5.0	0.05	Nessler (2)	60	R1
Bromine	3672-01	DC1200-BR	0–7.0	0.05	DPD Tablets (1)	100	NH
Chlorine (Free & Total)	3670-01	DC1200-CL	0–4.0	0.05	DPD Tablets (2)	100	NH
Chlorine (Free & Total)	3670-01-LI	DC1200-CL-LI	0–4.0	0.05	DPD Liquid (3)	140	R1
Chlorine Dioxide	3671-01	DC1200-CLO	0–7.0	0.05	DPD with Glycine Solution (2)	100	NH
Copper	3673-01	DC1200-CO	0–6.0	0.03	Diethyldithiocarbamate (1)	100	NH
Fluoride	3674-01	DC1200-FL	0–2.0	0.028	Alizarin-Zirconyl (2)	100	LQ
Iron	3681-01	DC1200-FE	0–4.0	0.25	1,10 Phenanthroline (2)	100	R1
Manganese	3682-01	DC1200-MN	0–0.7	0.02	PAN (3)	100	R3
Molybdenum	3676-01	DC1200-MO	0–30	0.5	Thioglycolate (3)	50	R3
Nitrate Nitrogen	3677-01	DC1200-NA	0–3.0	0.05	Cadmium Reduction (2)	40	R1
Ozone	3678-01	DC1200-OZ	0–0.4	0.04	Indigo Blue (3)	100	NH
Ozone (Without other oxidizers)	3598	DC1200-OZ-DPD	0-3	0.03	DPD Liquid	140	R1
Phosphate	3679-01	DC1200-PLR	0–3.0	0.07	Ascorbic Acid (2)	100	R2
Sulfate	3683-01	DC1200-SU	0–100	1.0	Barium Chloride (1)	100	R1

Replacement Reagents for 1200 Chlorine

Liquid Reagents

30 mL (1 oz.)	Code	Ship Code
DPD 1A	P-6740-G	NH
DPD 1B	P-6741-G	R2
DPD 3	P-6743-G	NH

60 mL (2 oz.)	Code	Ship Code
DPD 1A	P-6740-H	NH
DPD 1B	P-6741-H	R2
DPD 3	P-6743-H	NH

Tablet Reagents

Tablet	50	100	1000	Ship Code
Chlorine DPD #1 Instrument*	6903A-H	6903A-J	6903A-M	NH
Chlorine DPD #3 Instrument*	6197A-H	6197A-J	6197A-M	NH
Chlorine DPD #4 Instrument*	6906A-H	6906A-J	6906A-M	NH

* Instrument DPD featuring new ultra-clear fast dissolving tablets.

Easier push-thru packaging!

DPD Powder Pop® Dispenser

LaMotte now offers the Powder Pop Dispenser – a hand held, single-dose dispenser for 10 mL samples that delivers a precise pre-measured dose of DPD reagent directly to your sample. Each Powder Pop kit includes enough reagent for 400 tests.

To Order:

Free Chlorine Powder Pop Dispenser (Order Code 3-0032)

Total Chlorine Powder Pop Dispenser (Order Code 3-0033)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Model 1200 & 1200 UDV · Absorbance Colorimeters

The versatile 1200 Series of single wavelength colorimeters now comes with the capability to display readings directly in absorbance units. Six different wavelengths are available, with two sample vial options, to provide maximum flexibility for your analytical procedures. Microprocessor control and advanced design assure accuracy, easy operation, and durability.

Absorbance colorimeter kits are supplied with vials or cuvettes, water sample collecting bottle, 3 mL syringe (1200-UDV only), all in a sturdy carrying case.

Model 1200 Meter

For 25mm vials
Order Codes

Listed by wavelengths:

3627-420
3627-510
3627-530
3627-562
3627-570
3627-605

Model 1200-UDV Meter

For 10mm cuvettes
Order Codes

Listed by wavelengths:

3627-420-UDV
3627-460-UDV
3627-510-UDV
3627-530-UDV
3627-562-UDV
3627-570-UDV
3627-605-UDV

Instrument Type:	Single wavelength, absorbance colorimeter
Measurement Wavelengths:	420nm, 460nm, 510nm, 530nm, 562nm, 570nm, or 605nm
Readable Resolution:	0.01 Absorbance Unit
Photometric Precision:	±0.001 Absorbance Unit
Range:	0-2.00 Absorbance Units
Display:	3½ digit LCD
Response Time:	2 seconds
Detector:	Silicon Photodiode
Sample Chamber:	Meters are available with one of two chambers to accept 25mm flat-bottomed glass vials (1200) or 10 mm square polystyrene cuvettes (1200-UDV)
Light Source:	LED
Interface:	RS-232 serial interface, 8 pin mDIN, 9600b, 8 data bits, 1 stop bit, no parity
Power:	Battery Operation: Alkaline 9-volt DC battery; Line Operation: 120V/60Hz, 230V/50Hz with adapter

Chlorine Standards for Model 1200 & SMART3

For use with the 1200 series and SMART3 chlorine colorimeters. Secondary standards provide a fast way to check calibration without the burden of making primary standards. Based on Standard Methods for the Examination of Water and Wastewater, the operator can calibrate a colorimeter using a permanganate primary standard or a chlorine primary standard. Once the meter is calibrated using the primary standard, the operator can insert secondary standards periodically to evaluate the calibration of the instrument.

- Secondary standard kit contains a blank and 3 standards for low, mid-range, and high chlorine calibrations.
- Packaged in a small plastic case with Certificate of Analysis stating range of each standard.

For a complete listing of STANDARDS SEE PAGE 93

To Order:

DPD Chlorine Secondary Standards, Order Code 4140-02
FAS-DPD Titration Kit for Chlorine Titration, Order Code 3176-02
Standard Chlorine Solution, 250 ppm, Order Code 6973-H (60 mL), Order Code 6973-L (475 mL)
Permanganate Solution, 1000 ppm, Order Code 3858-H (60 mL)

TRACER PockeTesters

The world's first pocket-sized ISE meter for measuring total chlorine.
Use it to test pH and ORP with interchangeable flat surface sensors.

Total Chlorine TRACER

Order Code 1740

- Read Total Chlorine from 0.00-10 ppm
- Readings are not affected by sample color or turbidity
- Automatic self calibration; extra bold display includes an analog bar graph feature; memory can store up to 15 readings
- Chlorine and pH modes also display sample temperature
- Unit identifies which probe is in use and retains calibrations
- Automatic shut-off and Low Battery indicator; uses four 3V CR-2032 batteries

- Includes 100 reagent tablets at almost half the price of similar Chlorine ISE reagents
- Follows EPA protocol for ISE methods

EPA APPROVED for NPDES monitoring

TRACER KIT with pH, Total Chlorine and ORP probes

Order Code 1740-KIT-01

Includes Tracer meter with pH, Total Chlorine and ORP probes, 100 Chlorine tablets, 50 pH 7.0 buffer tablets, tablet crusher and convenient carrying case.

1740-KIT-01

pH TRACER

Order Code 1741

Provided with 4, 7, and 10 pH buffer tablets.

- Rugged flat surface electrode will alert user when it's time to "RENEW"
- A "CAL" indicator shows when to recalibrate and user can select a 1, 2, or 3 point calibration
- Includes Automatic Temperature Compensation and displays temperature while showing pH result

Range:	0.00 to 14.00 pH
Temp:	32° to 149°F (0° to 65°C)
Resolution:	0.01 pH
Accuracy:	±0.01 pH

TRACER with pH and Total Chlorine probes

Order Code 1741-KIT-01

Includes Tracer with pH and Total Chlorine probe, 100 Chlorine tablets, 50 pH tablets, tablet crusher in a convenient carrying case.

ORP TRACER

Order Code 1742

- High resolution to 1 mV
- Automatic self calibration

Range:	-999 to 999 mV
Resolution:	1 mV
Accuracy:	±4 mV

TRACER KIT

with pH and ORP probes

Order Code 1742-KIT-01

Includes Tracer with pH and ORP probe, 100 Chlorine tablets, 50 pH tablets, tablet crusher in a convenient carrying case.

OPTIONS

Additional Probes

Order Code 1733 pH Sensor (0-14.00/±0.01 pH)
Order Code 1734 ORP Sensor (±999mV/±4mV)
Order Code 1732 Cl2 Sensor (0-10.00/±10% of reading)

Chlorine Test Tablets

Order Code 7044A-J

Specially formulated just for the TRACER, these deliver a precise amount of iodide for a 20 mL sample. Available in packages of 100.

EC/TDS/SALT TRACER

Code 1749

- Easy to use
- 2% accuracy for EC, TDS, and Salt modules
- Automatic temperature compensation
- Self calibration
- Memory can store up to 25 readings; auto-power off after 10 minutes of no button presses
- Automatic shut-off and low battery indicator; uses four 3V CR-2032 button batteries

Options:

EC/TDS/SAL Replacement Electrode*, Order Code 1765

Sample Cup w/cap, Order Code 1745-1

Conductivity Standard, 84 µS, Order Code 6312-G

Conductivity Standard, 1413 µS, Order Code 6354-J

Conductivity Standard, 12,880 µS, Order Code 6317-G

Conductivity:	0 to 199.9 µS, 200 to 1999 µS, 2.00 to 19.99 mS
TDS:	0 to 9,999 ppm
Salinity:	0 to 9,999 ppm
Temperature	32°F to 149°F (0 to 65°C)
Accuracy:	EC, TDS, Salt: ± 2% FS; Temperature: ± 1°C (1.8°F)

*Not interchangeable with Cl/pH/ORP TRACER

pH/TDS/SALT

Code 1766

- Measures five parameters including Conductivity, TDS, Salinity, pH, and Temperature using one electrode
- Units of measure: pH, µS, mS, ppm, ppt, mg/L, g/L, °C, °F
- Memory stores up to 25 labeled readings; auto power off and low battery indicator
- Adjustable Conductivity to TDS ratio

Options:

pH/EC/TDS/SAL Replacement Electrode*, Order Code 1755

Sample Cups w/cap, Order Code 1745-1

Conductivity Standard, 84 µS, Order Code 6312-G

Conductivity Standard, 1413 µS, Order Code 6354-G

Conductivity Standard, 12,880 µS, Order Code 6317-G

	Range	Resolution	Accuracy
Conductivity	0 to 199.9 µS, 200 to 1999 µS, 2.00 to 19.99 mS	0.1 µS	±1%
TDS/Salinity	0 to 99.9 ppm (mg/L), 100 to 999 ppm (mg/L), 1.00 to 9.99 ppt	0.1 ppm (mg/L)	±2%
pH	0.00 to 14.00 pH	0.01 pH	±0.01 pH
Temperature	32° to 149°F (0 to 65°C)	0.1°F/°C	±1.8°F/°C

Fluoride TRACER

Order Code 1756

- The first Fluoride meter with built-in Automatic Temperature Compensation and fastest response (<1 min)
- Small sample/TISAB volume required for testing
- Complies with EPA Method 340.2 (Potentiometric Ion Selective Electrode)
- Automatic electronic 1 or 2 point calibration with offset adjustment
- Memory stores 25 labeled readings and water resistant to IP54
- Complete with electrode, 20 TISAB reagent tablets, sensor cap, four 3V button batteries, and 48" (1.2m) neckstrap

Fluoride TRACER KIT

Order Code 1756-KIT-01

- Includes Tracer meter with 4 oz. bottle of 1 ppm Fluoride Standard and convenient carrying case.

Options:

TISAB Reagent, 100 Tablets, Order Code 7024-J

Replacement Electrode, Order Code 1757

Fluoride Standard, 1 ppm, 1000 mL, Order Code 2798-M

Fluoride Standard, 1,000 ppm, 60 mL, Order Code 4154-H

Fluoride Standard, 1,000 ppm, 500 mL, Order Code 4154-L

Fluoride:	0.1 to 10 ppm, max. resolution: 0.1 ppm, accuracy: ±3% rdg
Temperature	32°F to 140°F (0 to 60°C), max. resolution: 0.1 °F, accuracy: ±1.8°F/1°C
Accuracy:	EC, TDS, Salt: ± 2% FS; Temperature: ± 1°C (1.8°F)

See pages 32 for pH Tablets

Dissolved Oxygen Meters

Dissolved Oxygen Tracer

Order Code 1761

IP67 WATERPROOF

- Oxygen level displayed as % Saturation from 0 to 200.0% or Concentration from 0 to 20.00 ppm (mg/L)
- Adjustable Altitude Compensation (0-20,000 ft in 1,000 ft increments)
- Adjustable Salinity Compensation from 0 to 50 ppt
- Memory stores up to 25 data sets with DO and Temperature reading
- Self-calibration on power up; Data, Hold, Auto power off, Low battery indicator
- Waterproof to IP67
- Optional 3 ft (1m) or 16 ft (5m) extension cable; complete with DO electrode, protective sensor cap, spare membrane cap, electrolyte, four 1.5V CR-2032 batteries, and 48" (1.2m) neckstrap

	Range	Resolution	Accuracy
DO (sat. mode)	0 to 200.0%	0.1%	±2% FS
DO (conc. mode)	0 to 20.00 ppm (mg/L)	0.01 ppm (mg/L)	0.4 ppm (mg/L)
Temp.	32 to 122°F (0 to 50°C)	0.1°F/°C	±1.8°F (1°C)
Dimensions	1.4x6.9x1.6" (36x176x41mm)		
Weight	3.8 oz (110g)		

Accessories

- DO Membrane Kit, 6 screw-on membranes and solution (Order Code 1761M)
- DO Sensor Module (Order Code 1762)
- 3 ft. Cable (Order Code 1763)
- 16 ft. Cable (Order Code 1764)

Dissolved Oxygen Meter

Order Code 5-0107-01

- No meter warm-up required
- Low-maintenance probe
- Key in salinity and pressure values manually
- Independent 100% and zero adjustment calibrations
- Offset adjustment capabilities
- Displays electrode diagnostics
- Easily toggle from mg/L (ppm) or % saturation to temperature mode

	Range	Resolution	Accuracy
mg/L (ppm)	0.00 to 20.00 mg/L (ppm)	0.01 mg/L (ppm)	±1.5% FS
% Saturation	0.0 to 200.0%	0.1%	±1.5% FS
Temp.	-5.0 to 105.0°C	0.1°C	±0.5°F
Salinity correction	0.0 to 50.0 ppt	0.1 ppt	Method: Key in manually or automatic correction
Barometric pressure correction	500 to 1499 mm Hg	1 mm Hg	Method: Key in manually or automatic correction
Temperature compensation	Automatic from 0 to 50°C		
Operating temperature	0 to 50°C		
Probe	Galvanic, 3 ft. probe cable		
Power	Four 1.5 V AAA batteries (included), >700 hrs continuous use		
Dimensions	5.5"L x 2.7"W x 1.3"H		
Weight	1.0 lb (0.45 kg)		

Accessories

- Replacement Probe (Order Code 5-0129)
- Replacement Membrane Package including electrolyte solution (Order Code 5-0137)

pH PockeTester 10

Order Code 5-0103 ***(Replacement Electrode, Code 5-0097)***

- ±0.1 pH accuracy

pH PockeTester 20

Order Code 5-0104 ***(Replacement Electrode, Code 5-0097)***

- ±0.01 pH accuracy

Both meters feature automatic temperature compensation, and buffer recognition for three point calibration based on US (pH 4.01, 7.00, 10.01) or NIST (pH 4.01, 6.86, 9.18) systems. The sensor is a double junction Ag/AgCl system with polymer gel. The IP67 rated housing features a 1.0625" (26.99 mm) display, which also displays diagnostic messages. Auto-off after 8.5 minutes to conserve battery life.

PAGE 27 for complete PockeTester specs

Double Junction ORP PockeTester

Order Code 5-0079

- –999 mV to +1000 mV
- Large surface area platinum band sensor
- 1 mV resolution, 2 mV accuracy
- HOLD function, Auto-off

PockeTesters

Code 5-0080

Code 5-0078

Code 5-0082

Microprocessor-Based TDS Dual Range PockeTester

Order Code 5-0080

- 0-2000 ppm (10 ppm resolution) ; 0-10.00 ppt (0.10 ppt resolution)
- ±1% full-scale accuracy
- Automatic temperature compensation (ATC)
- Replacement electrode
- Push-button calibration
- Auto shut-off
- Full reading displayed – no need to multiply

Replacement Probe (Order Code 5-0084)

Salt PockeTester

Order Code 5-0078-01

- 0–10 ppt (0.10 ppt resolution)
- Carrying Case and calibration standard included

Replacement Probe (Order Code 5-0084)

Microprocessor-Based EC Conductivity Dual Range PockeTester

Order Code 5-0082

- 0-2000 µS (10 µS resolution); 0-20.00 mS (0.10 mS resolution)
- ±1% full-scale accuracy
- Automatic temperature compensation (ATC)
- Replacement electrode
- Push-button calibration
- Auto shut-off
- Full reading displayed – no need to multiply

Replacement Probe (Order Code 5-0084)

PockeTester Specifications

	Specifications for pH PockeTesters		Specifications for Specialty PockeTesters		
Model	pH PockeTester 10	pH PockeTester 20	Min-Max Thermometer	ORP PockeTester	Salt
Code	5-0103	5-0104	5-0095	5-0079	5-0078-01
Range	–1.0 to 15.0 pH; extended range		–10 to 200°F, 14 to 392°C	–999 mV to +1000 mV	0-10.00 ppt salinity
Resolution	0.1 pH	0.01 pH	0.1°F to 199.9°, 1°C above 200°	1 mV	0.10 ppt salinity
Accuracy	±0.1 pH	±0.01 pH	±1.8°F / ±1.0°C	±2 mV	±10% full-scale
Calibration	Select up to 3 points (4.0, 7.0, 10.0 or 4.01, 6.86, 9.18)		Factory calibrated; fine adjustment through keypad	Offset calibration to ORP standard or work standard	One-point with trimpot
Operating Temperature	32 to 122°F; 0 to 50°C	32 to 122°F; 0 to 50°C	32 to 122°F; 0 to 50°C	32 to 122°F; 0 to 50°C	32 to 122°F; 0 to 50°C
Temperature Compensation	Automatic (ATC) 0 to 50°C		—	—	Automatic(ATC) 0 to 50°C
Special Functions	On/Off or Auto-Off after 8.5 min.; HOLD; CALibrate; CONfirm		On/Off or Auto-Off after 8.5 min.; HOLD; °F or °C scale selectable; factory calibration maintained when batteries are replaced	On/Off or Auto-Off after 8.5 min.; CALibrate; CONfirm; HOLD (HO) and HOLD/ CANCEL (HC)	
Power & Battery Life	Four 1.5V alkaline button cell batteries (supplied), 500 hour use		LR-44 button cell. 2 yr life	Four 1.5V alkaline batteries (supplied) 500 hrs. use	Four 1.5V alkaline batteries (supplied) 150 hrs. use
Dimensions & Weight	8.5" (216 mm) L x 2.4" (61 mm) W x 2.5" (64 mm) H (boxed); 6.5" (165 mm) L x 1.5" (38 mm) Dia. (unit only); 4.5 oz/125 gms (boxed); 3.25 oz./90 gms (unit only) Memory Thermometer Probe: 4.3" (109 mm) x 0.14" (4 mm); top is 1.8" (46 mm); weight 3 oz				

	Specifications for TDS & EC Waterproof PockeTesters	
Model	TDS Dual Range	EC Dual Range
Code	5-0080	5-0082
Replacement Electrode	5-0084	5-0084
Range	0-2000 ppm/ 0-10 ppt	0-2000 µS; 0 to 20 mS
Resolution	10 ppm/0.10 ppt	10 µS; 0.10 mS
Accuracy	±1%FS	
Calibration	One-point, push-button calibration using buttons inside battery compartment	
Operating Temp.	32 to 122°F; 0 to 50°C	
Temperature Comp.	Automatic (ATC) 0 to 50°C	
Special Functions	Full reading displayed	
Power & Battery Life	Four 1.5V alkaline batteries (supplied); 150 hours	
Dimensions & Weight	8.5" (216 mm) L x 2.4" (61 mm) W x 2.5" (64 mm) H (boxed); 6.5" (165 mm) L x 1.5 (38 mm)" Dia. (unit only); 4.5 oz./125 gms (boxed); 3.25 oz./90 gms (unit only)	

Temperature Measurement

IR Meter with Color Alert System

Code 5-0133

Convenient non-contact temperature measurements, now with a laser sighting, plus color and sound alerts!

Features

- Fast and accurate measurements at 12" where the two lasers converge with 12:1 field of view
- Measures up to 950°F (510°C)
- **Blue** backlit dual LCD display changes to **Red** backlit outside set points
- Instantaneous response captures spikes in temperature
- Max mode captures and holds rapidly changing temperatures
- Lock function for continuous readings
- Adjustable emissivity increases measurement accuracy for different surfaces
- Double molded housing
- Complete with case and 9V battery
- Adjustable High/Low set points with color and audible alarms signal out of range temperature

Blue backlight: within temperature range

Red backlight plus audible alert: exceeds temperature

Range:	-4 to 950°F (-20 to 510°C)
Resolution:	1°C/1°F
Accuracy:	25 to 260°C (77 to 500°F): ±(1% of rdg +2°F/1°C)
Repeatability:	±0.5% or 1.8°F/1°C
Response Time:	150mSec
Emissivity:	0.10 to 1.00 adjustable
Distance-to-Spot Size:	12:1
Power:	One 9V alkaline battery
Dimensions:	5.7 x 4 x 1.6 inches (146 x 104 x 43 mm)
Weight:	5.74 oz. (163g)

"Min-Max" Memory Thermometer

Order Code 5-0095

- Range: 14 – 392°F or -10 – 200°C
- °F or °C selectable scale
- Recalls minimum and maximum temperature

LaMotte pH, CON, TDS Meters

- Push button operation
- Up to five point calibration
- Temperature readout
- Automatic Temperature Compensation
- Auto-off after 17 minutes; Hold function
- Buffer recognition (pH 5 meter)
- Adjustable conductivity to TDS factor (TDS 6 meter)

Microprocessors have enabled meter manufacturers to combine many features into smaller designs with better accuracy. The 5 and 6 Series meters are good examples (see specifications below). All meters include electrodes and temperature probes, and are available with or without a carrying case.

- The pH 5 without case includes pH 4, 7 and 10 buffer tablets.
- The pH 5 with case includes pH 4, 7 and 10 buffer liquids.
- The TDS 6 and Con 6 with carrying cases include two calibration standards.
- All meters have two-year warranties.

Model	pH 5 (pH)	pH 5 (Temperature)	CON 6 Meter (Conductivity)	TDS 6 Meter (TDS)	CON 6 & TDS 6 Meters (Temperature)
Order Code	w/out case 5-0034-01 with case 5-0035-01		w/out case 5-0038-02 with case 5-0039-02	w/out case 5-0036-02 with case 5-0037-02	
Replacement Probe	pH Probe Order Code 1904	Temperature Probe Order Code 5-0041	CON/TDS Probe Order Code 5-0106		
Range:	0.00 to 14.00 pH	0.0 to 100.0°C	0.0 to 20.00, 200, 2,000.0 µS 0 to 20.00, 200.0 mS	0.0 to 10.00, 100.0, 1000 ppm, 1.0 to 10.00, 100.0, 200 ppt	-10.0 to 110.0°C
Resolution:	0.01 pH	0.1°C	0.01, 0.1, 1 µS 0.01, 0.1 mS	0.01, 0.1, 1.0 ppm 0.01, 0.1 ppt	0.1°C
Accuracy:	±0.01 pH	±0.5°C	±1% full scale or ±1 digit	±1% full scale	±0.5°C
Calibration:	Up to 5 Buffer Values	Offset 0.1°C increments	up to 5 points (1 per range) for multi-point calibration; or 1 point for single point for entire range		Offset 0.1°C increments
Temperature Compensation:	Automatic Temperature Compensation (ATC)		Automatic Temperature Compensation (ATC) fixed 2% per °C factor, adjustable 73%		
Power:	Four AAA alkaline batteries (supplied); >70 hours continuous use		Four AA alkaline batteries (supplied) >100 hours continuous use		
Display:	Single Custom LCD		Single Custom LCD		
Auto shut-off:	After 17 minutes		After 17 minutes		
Operating Temperature:	32 to 122°F; 0 to 50°C		32 to 122°F; 0 to 50°C		

pHPLUS Direct Digital pH/ISE Meter

pHPLUS DIRECT Meter

Laboratory precision in a water-resistant design! Read pH, mV/R.mV, temperature, and concentration with accuracy – ISEs read concentration in ppm. Easy-to-use in any test mode. Includes pH probe, temperature probe, buffers and rubber boot with stand.

Specifications	
pH	
Range:	0.00 to 14.00
Resolution:	0.01
Accuracy:	0.01
Calibration:	Up to 5 points
Electrode:	Epoxy, Ag/AgCl
Temperature	
Range:	0 to 100°C
Resolution:	0.1°C
Accuracy:	±0.1°C
Concentration	
Range:	0.00 to 100
Resolution:	± LSD
Accuracy:	±0.5% or ±1 LSD
mV/R.mV	
Range:	±500mV
Accuracy:	±1 mV
Resolution:	1 mV
Calibration:	Up to 5 points
Inputs:	1 BNC, Temp probe, power, ref. pin
Power:	4 AAA batteries
Size (LxWxH):	2.75W x 5.75H x 1.375D in.

Optional ISE Electrodes*

Although the pHPLUS Direct reads directly in ppm, an initial calibration is required. The standard solution, replacement electrolyte, ionic strength adjustor and pipet are included in the Accessory Kit. The ammonia accesory kit also contains replacement membranes.

pHPLUS DIRECT Meter

Code	Description
5-1936-01	pHPLUS DIRECT Meter, liquid buffers (4, 7, 10) w/case
1904	pH Electrode, gel-filled
1909	Temperature Probe

Ion Selective Electrodes

Code	Description
5-0043	Ammonia
5-0048	Fluoride
5-0052	Nitrate

Accessory Kits

Code	Description
5-0098	Ammonia
5-0099	Fluoride
5-0100	Nitrate

***Accessory Kit required to calibrate the ISE.**

DPD TesTabs® Instrument Grade

LaMotte has developed a rapid dissolve instrument grade DPD tablet system. Instrumental analyses require a clear, particle-free testing solution. In the past, it was necessary to use a crusher to dissolve the instrument grade tablets. Now, free and total chlorine samples can be done with instrument grade tablets that dissolve without crushing.

	Quantity/Order Code			
Tablet	50	100	1000	Ship Code
Chlorine DPD #1 Instrument*	6903A-H	6903A-J	6903A-M	NH
Chlorine DPD #3 Instrument*	6197A-H	6197A-J	6197A-M	NH
Chlorine DPD #4 Instrument*	6906A-H	6906A-J	6906A-M	NH

* Instrument DPD featuring ultra-clear fast dissolving tablets.

See page 71 for Visual Tablets

DPD Liquid Reagents

The liquid alternative to DPD tablets can be used with existing LaMotte chlorine comparators or colorimeters. DPD 1A and DPD 1B are added to a 5 or 10 mL sample to test Free Available Chlorine. DPD 3 is added to the reacted sample to measure Total Chlorine. Liquid reagents are also available to measure pH, Hardness, Alkalinity, and Copper.

30 mL (1 oz.)	Code	Ship Code
DPD 1A	P-6740-G	NH
DPD 1B	P-6741-G	R2
DPD 3	P-6743-G	NH

60 mL (2 oz.)	Code	Ship Code
DPD 1A	P-6740-H	NH
DPD 1B	P-6741-H	R2
DPD 3	P-6743-H	NH

pH Buffers/Electrode Soaker

Standardized pH Buffer Solutions

For use in calibration of pH meters. Ordering information for all buffers is listed below.

pH Value	Code	Size
4.01	2866-J 2866-L	120 mL 500 mL
6.86	2808-L	500 mL

Note: Other pH values available

pH Value	Code	Size
7.00	2881-J 2881-L	120 mL 500 mL
9.18	2809-L	120 mL
10.00	2896-J 2896-L	120 mL 500 mL

Color-Coded pH Buffer Solutions

Minute amount of color permits immediate visual distinction of different buffer values.

pH Value	Code	Color	Size
4.01	3771-L	Red	500 mL
7.00	3772-L	Yellow	500 mL
10.0	3773-L	Blue	500 mL

Buffer Tablets

Add one tablet to 20 mL of Deionized Water to produce buffers. Available in 50 and 100 tablet packs. In foil strips of 10 tablets each.

pH Value	Code
4.0	3983A-J-100
4.0	3983A-H-50
7.0	3984A-J-100
7.0	3984A-H-50
10.0	3985A-J-100
10.0	3985A-H-50

Electrode Soaker Bottle

Order Code 0668

Continuously soaks pH electrode in a storage solution to prevent probe dry out. Twist top "O" ring seal prevents leaks.

Conductivity/TDS Solutions

The following potassium chloride solutions can be used to standardize conductivity meters. TDS values are based on a 0.7 conversion from conductivity.

Code	Description	Size
6416-L	74 µS/cm, 52 ppm	500 mL
6312-L	84 µS/cm, 59 ppm	500 mL
6417-L	718 µS/cm, 503 ppm	500 mL
6354-L	1,413 µS/cm,989 ppm	500 mL
6418-L	6,668 µS/cm, 4668 ppm	500 mL
6317-L	12,880 µS/cm, 9016 ppm	500 mL
6419-L	58,640 µS/cm, 41,048 ppm	500 mL

Conductivity Neutralizing Solutions

Used to neutralize hydroxl ion in boiler water, thus enabling accurate determinaion of ionic conductivity.

Code	Description	
6483-H (60 mL) 6483-L (500 mL) 6483-N (3800 mL)	Conductivity Neutralizing Solution	Contains citric acid and phenolphthalein. Add liquid until sample changes color. Available in 60 mL, pint, and gallon sizes.
6479-J	Gallic Acid Powder	Organic acid powder; indicator must be purchased and added separately. Add raw powder to sample containing indicator until color changes. Available in 100 g.
3705-L	Acid Indicator	Contains acetic acid and phenolphthalein. Add liquid until sample changes color. Available in 500 mL (pint).

Convenient and Economical

LaMotte offers a convenient, economical way to perform spot checks for several water quality factors. LaMotte test strips are a great way to monitor water without having to use reagents or field kits. Strips are available for the factors below...and we're working on more!

Single Factor Test Strips

Test Factor	Code	Range (ppm)	Water Testing Application*	# of Tests Per Factor/Per Vial	Values (ppm)
Alkalinity	2997	0-180	Drinking, Food/Beverage	50	0, 40, 80, 120, 180
Borate	3017-G	0-80	Pool	25	0, 15, 30, 50, 80
Chlorine Dioxide	2999LR	0-10	Drinking, Food/Beverage	50	0, 0.25, 0.5, 1, 3, 10
Chlorine Dioxide	3002	0-500	Medical, Food/Beverage	50	0, 10, 25, 50, 100, 250, 500
Chlorine, Free, Low Range	2964-G	0-10	Drinking, Food/Beverage, Medical	25	0, 0.5, 1, 3, 5, 10
Chlorine, Total, Low Range	2963LR-G	0-10	Drinking, Food/Beverage, Medical	25	0, 0.25, 0.5, 1, 3, 10
Chlorine, Total, Low Range	2963LR-J	0-10	Drinking, Food/Beverage, Medical	100	0, 0.25, 0.5, 1, 3, 10
Chlorine, Total, Low Range	2979	0-5	Drinking, Food/Beverage	50	0, 0.5, 1, 3, 5
Chlorine, Free & Total	3027-G	0-10	Drinking, Food/Beverage, Medical	25	0, 0.5, 1, 3, 5, 10
Chlorine, High Range	3031	0-800	Food/Beverage, Medical	50	0, 50, 100, 250, 500, 800
Copper	2991-G	0-3.0	Drinking, Pool	25	0, 0.3, 0.6, 1, 3
Hardness, Low Range	2981	0-180	Drinking, Food/Beverage	50	0, 30, 60, 120, 180
Iron	2935-G	0-5	Drinking, Pool	25	0, 0.3, 0.5, 1, 3, 5
Molybdenum Kit*	3628-01	0-5	Industrial	50	0, 0.5, 1, 2, 5
Nitrate	3012-G	0-200	Pool	25	0, 10, 30, 60, 120, 200
pH, Wide Range	2974	4-10 (pH)	Drinking, Food/Beverage	50	4, 5, 6, 7, 8, 9, 10
Peracetic Acid	3000	0-160	Food/Beverage	50	0, 10, 20, 50, 85, 160
Peracetic Acid, Low Range	3000LR	0-50	Food/Beverage	50	0, 5, 10, 20, 30, 50
Peracetic Acid, High Range	3000HR	0-1000	Food/Beverage	50	0, 50, 100, 250, 500, 1000
Hydrogen Peroxide HR	2984	0-90	Pool	25	0, 15, 30, 50, 90
Hydrogen Peroxide	2984LR	0-50	Drinking, Food/Beverage	25	0, 1, 3, 10, 30, 30, 50
Phosphate, Low Range	3021	0-2500 ppb	Pool	25/50	0, 100, 200, 300, 500, 1000, 2500 ppb
Phosphate, High Range	3040-G	3000-12000 ppb	Pool	25	3000, 6000, 12000 ppb
QAC Dual Range	2934	0-80 0-800	Food/Beverage	50	Low: 0, 10, 20, 40, 80 ppm High: 0, 100, 200, 400, 800 ppm
Sodium Chloride	2998	1500-5000	Pool	10, 50	1500, 2000, 2500, 3000, 3500, 4000, 5000

* Kit includes a pre-treatment reagent.

ACCURATE & RELIABLE Easiest test strips to read.

CONNECTED CAP Can't fall into the water or be lost.

HINGE GUARANTEE Rated for 1000+ openings.

LEAKPROOF Airtight seal meets USDA and FDA requirements.

DESICCANT WALL Can't fall onto wet hands.

6 GRAMS (NOT 3) Desiccant liner is double the industry standard for moisture protection.

DOUBLE DUTY High-density outer shell, combined with desiccant liner, ensure less moisture and light.

HDPP PROTECTION High density polypropylene plastic protects better than common HDPE bottles.

Multi-Factor Test Strips

Test Factor	Code	Range	Water Testing Application*	# of Tests Per Factor/ Per Vial	Values (ppm)
Copper, pH, & Alkalinity (sold only in case of 12)	3001-G	0-3 Copper 6.2-8.4 pH) 0-240 Alkalinity	Pool	25 25 25	0, 0.3, 0.6, 1, 3 6.2, 6.8, 7.2, 7.6, 8.0, 8.4 0, 40, 80, 120, 180, 240
Iron & Copper	2994	0-5 Iron 0-3 Copper	Drinking, Pool	25 25	0, 0.3, 0.5, 1, 3, 5 0, 0.3, 0.6, 1, 3
Iron, pH, Hardness, Total Chlorine	2992	0-5 Iron 4-10 pH 0-400 Hard 0-10 TCl	Drinking, Industrial Water Features	25 25 25 25	0, 0.3, 0.5, 1, 3, 5 4, 5, 6, 7, 8, 9, 10 0, 50, 100, 200, 400
Wide Range (pH & Total Chlorine)	2987-G	4-10 pH 0-50 TCl	Drinking, Pool, Food/Beverage	25 25	4, 5, 6, 7, 8, 9, 10 0, 1, 5, 10, 20, 50
6-Way Drinking Water	2933-G	0-10 FCl 0-10 TCl 0-400 Total Hardness (0-23 gpg Total Hardness) 4-10 pH 0-10 Nitrite 0-10 Nitrate	Drinking	25	0, 0.5, 1, 3, 5, 10 0, 0.5, 1, 3, 5, 10 0, 50, 100, 200, 400 (gpg: 0, 3, 5.8, 11.7, 23) 4, 5, 6, 7, 8, 9, 10 0, 0.5, 1, 5, 10 0, 5, 10, 25, 50
5-Way Natural Water Fresh & Salt Water	3038-G	0-200 Nitrate 0-10 Nitrite 6.0-9.0 pH 0-240 Alkalinity 0-180 Total Hardness	Environmental, Aquarium	25	0, 20, 40, 80, 160, 200 0, 0.5, 1, 3, 5, 10 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0 0, 40, 80, 120, 180, 240 0, 30, 60, 120, 180
Nitrate & Nitrite	2996	0-50 (Nitrate) 0-10 (Nitrite)	Drinking	50 50	0, 5, 10, 25, 50 (NO_3-N) 0, 0.5, 1, 5, 10 (NO_2-N)

*Strips shown have been evaluated for use in these applications. Use in other applications is subject to potential interferences. Contact LaMotte Technical Services for more information.

Sanitizer Test Papers & Strips

Chemically treated paper strips change to indicate sanitizer level. Strips and color chart are packaged in a waterproof plastic vial. 2951 is specifically formulated to read all types of QAC.

Factor	Order Code	Range
Chlorine	4250-BJ	10, 50, 100, 200 ppm (200 papers)
Chlorine, Free, High Range	3031	0, 50, 100, 250, 500, 800 ppm (50 strips)
Iodine	2948-BJ	12, 25, 50, 100 ppm (200 papers)
QAC	2951	50, 100, 200, 400 ppm (100 strips)
QAC	3072-J	0, 100, 200, 300, 400, 500 ppm (100 strips)
QAC Dual Range Test Strips	2934	Low Range: 0, 10, 20, 40, 80 High Range: 0, 100, 200, 400, 800 (50 strips)
High Range QAC	2951HR	200, 400, 600, 1000, 1500 ppm (50 strips)

For PERACETIC ACID Test Strips, see page 34.

Micro Testing Simplified!

BioPaddles®

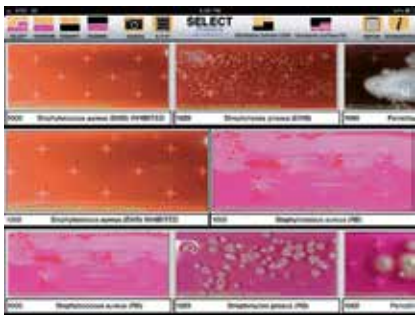
- Ready to use. Saves time!
- Longer shelf-life than traditional Petri dishes
- No refrigeration required

BioPaddles® are flexible dual-agar paddles each containing microbe-specific media enclosed in a sterile vial. Identify and quantify microbes in air, soil, water, or any surface!

Liquid Sampling: Remove the paddle from the vial and fill the vial (approximately 40ml) with the sample. Insert the paddle, swirl for 15 seconds. Pour out the liquid, replace the paddle in the vial, and incubate.

Surface Sampling: Remove the paddle from the vial and gently touch each paddle media surface to the sample surface. Replace paddle in the vial and incubate.

Air Sampling: Remove the paddle from the vial. Invert and mount the circular cap into the vial, exposing the agar covered paddle. Expose for 15 minutes. Replace the paddle in the vial and incubate.



All BioPaddles® products come with a **free app! LaMotte BioPaddles Colony ID™ App** lets users compare colony examples on BioPaddle agar types from 5 microhabitats (air, water, soil, surface and food). Also contains information regarding organisms, microbiological techniques, and more!

Download on the App Store

https://itunes.apple.com/us/app/id567584998

For fresh, brackish, and salt water use.

BioPaddles® Products—all packaged 10 paddles per box. Includes general instructions and provides access to detailed Technical Documents for each paddle type.

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1, r1) Small Qty. Hazardous Material - No Fees · (Lq, LQ, R2, r2, R3, r3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Type Of Agar(s)	Description	Code
Nutrient	For routine culture of non-fastidious bacteria.	5550
Sabouraud Dextrose	For selective cultivation of fungi (yeasts and molds)	5551
Tryptic Soy (TSA)/ Rose Bengal (RB)	For cultivation of a wide variety of microorganisms (TSA) and selective isolation of yeasts and molds (RB).	5552
Nutrient TTC/ MacConkey	**TTC**. For field sampling cultivation and enumeration of coliform bacteria total coliform count (TCC). Gram (-) bacterial colonies appear as red dots. Gram (+) bacteria are usually inhibited. **MAC**. Medium gives improved differentiation between coliforms and non-lactose fermenting organisms. Gram (+) cocci are usually inhibited.	5553

Coliform Screening Test

The 4-3616 is an easy-to-use, disposable 5-tube method to indicate the presence of Total Coliform Bacteria in a water supply. The water sample is placed in test vials containing the special coliform indicating tablets and stored at room temperature for a predetermined time period. After the required storage period, the vials are examined to determine the presence of coliform bacteria.

Code	Test System	Range/Sensitivity	# of Tests (# of Reagents)	Shipping Code (Wgt./lbs)
4-3616	Tableted nutrient based on 5 tube MPN	Presence/Absence	1 (1)	NH (1)

Biological Activity Reaction Test

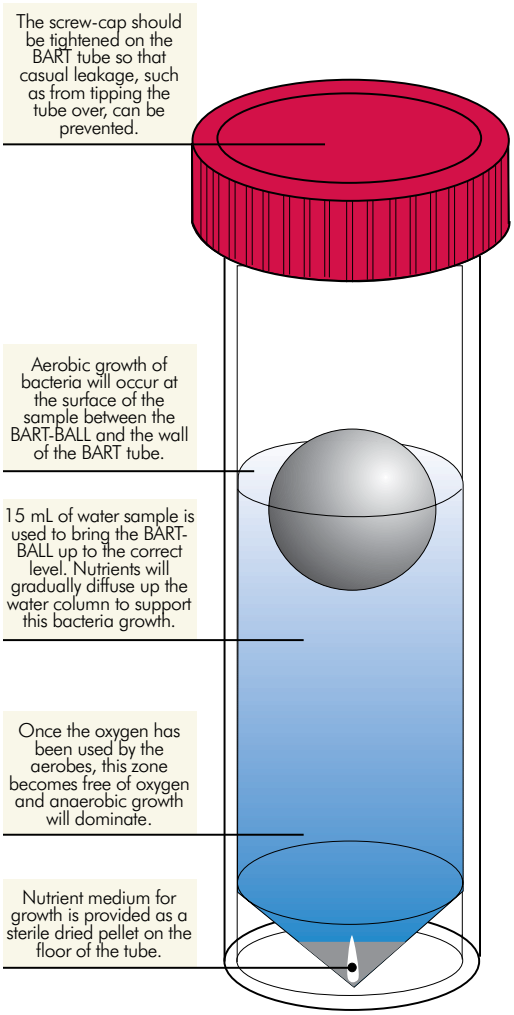
A simple yet effective method for monitoring the population size and/or activity of specific groups of bacteria.

BART Biodetector

With BART, you can monitor for Iron Related Bacteria (IRB), Sulfate Reducing Bacteria (SRB) and Heterotrophic Aerobic Bacteria (HAB) – the three most important agents involved in biofouling. Other BART systems are described below. These bacteria can cause corrosion, clogging, fouling of the water, and increased hygiene risks, so it is important to have an easy and accurate method of determining their presence and level of activity.

Easy to Use

The BART Biodetector requires no microscope, no laboratory, and no incubator! The test is done at room temperature in your office or treatment room, on a desk, shelf, or in a cupboard, and is viewed daily. Different microorganisms like to grow at different heights in a column of water to which nutrients have been added. BART biodetectors contain nutrients in the base of a column and a ball. The ball restricts the amount of oxygen entering the water column, so that aerobic organisms grow around the ball and anaerobic organisms grow deep down in the water column. By changing the nutrients in the base of the column, different organisms are encouraged to grow. BART determines presence and activity levels.



Easy to Analyze

The time taken for a color change (reaction) to occur gives a measure of the population size and activity. A color change occurs in the BART tube as a result of the oxygen gradient diffusing from the bottom upward. The change of color indicates a presence of bacteria within that sample. Interpretation is provided with the kit.

The Test

Full instructions for the use of BART biodetectors are included with your purchase. Each individual test consists of:

- Test vial with media and BART ball
- Outer tube for spill containment, odor control, disinfection, and disposal

To Order

Each kit number below includes nine (9) BARTs. Each BART test is color-coded for quick and easy recognition.

BART Color	Test	Order
Red	Iron Related Bacteria - IRB-BART	5-0024
Black	Sulfate Reducing Bacteria - SRB-BART	5-0025
Lime green	Slime Forming Bacteria - SLYM-BART*	5-0026
Combo	Three each of IRB-, SRB-, and SLYM-BART	5-0032
Blue	Heterotrophic Aerobic Bacteria - HAB-BART	5-0027

*The SLYM-BART requires the use of a fluorescent lamp (Order Code 5-0033)

In cleaning applications, P alkalinity is sometimes referred to as active alkalinity. The difference between the P reading and the T reading is "inactive" alkalinity.

Code 3569-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
ACIDITY A standard base titrates acidity to the phenolphthalein endpoint. The 7182 uses different sample sizes and a 1:10 dilution to test hydrochloric, sulfuric and phosphoric acids with either a 1 drop = 0.1% or 1 drop = 1.0 % equivalence.					
7182-01	HCl, H_2SO_4, H_3PO_4 Dropper Bottle	1 drop = 0.1 or 1.0% (as the particular acid)	50 at 10% (2)	R-7182-01	R1 (1)
ALKALINITY Kits use titrations with standard acid to the phenolphthalein (P) and/or total (T) alkalinity endpoint. The mixed indicator, BCG-MR, is used for total alkalinity determinations. Where hydroxyl(OH) alkalinity is determined directly, as with kit #7515, the sample is pre-treated with barium to precipitate carbonate alkalinity. All results are expressed as $CaCO_3$. To convert results to Na_2O, multiply the answer by 0.62.					
4491-DR-01	Total Alkalinity Direct Reading Titrator	0–200 ppm/4ppm as $CaCO_3CaCO_3$	50 at 200 ppm (2)	R-4491-DR-01	NH (1)
4533-DR-01	P & T Alkalinity Direct Reading Titrator	0–200 ppm/4 ppm as $CaCO_3$	50 at 200 ppm (3)	R-4533-DR-01	NH (1)
4533-01	P & T Alkalinity Dropper Pipet	1 drop = 10 ppm as $CaCO_3$	50 at 200 ppm (3)	R-4533	NH (1)
7240-02	P & T Alkalinity Dropper Bottle	1 drop = 10, 25, or 50 ppm as $CaCO_3$	100 at 500 ppm (3)	R-7240-02	R1 (2)
3467-01*†	P & T Alkalinity Direct Reading Titrator	0–200 ppm/4 ppm as $CaCO_3$	50 at 200 ppm (3)	R-3467-01	R1 (1)
7515-01	P, T, & OH Alkalinity Dropper Pipet	1 drop = 10 ppm as $CaCO_3$	50 at 200 ppm (4)	R-7515-01	R1 (1)
ALUMINUM A pink to red color will form when aluminum reacts with Eriochrome Cyanine R at pH 6.					
3569-01	Octa-Slide 2 Comparator	0, 0.1, 0.15, 0.2, 0.25, 0.3, 0.4, 0.5 ppm Al^{3+}	50 (2)	R-3569-01	NH (1)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Ammonia Nitrogen - Bromine

Code 3304-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
AMMONIA NITROGEN Two colorimetric methods are available. Nessler's reagent reacts with ammonia to form a yellow to brown color; salicylate reacts to form a blue color, which in combination with the yellow reagent color produces colors from yellow to blue. The salicylate method is preferred for salt water analysis and does not contain mercury salts as does the Nessler method.					
3304-01	Salicylate, Octa-Slide 2 Comparator	0.0, 0.05, 0.1, 0.25, 0.5, 1.0, 2.0 ppm NH_3–N	50 (3)	R-3304-01	R2 (1)
5864-01	Salicylate ColoRuler	0.1, 0.25, 0.50, 1.0, 2.0, 4.0 ppm NH_3–N	50 (2)	R-5864-01	R1 (1)
4795-01	Nessler, Octa-Slide 2 Comparator	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0 ppm NH_3–N	50 (2)	R-3315	R1 (1)
3680-01	Nessler Colorimeter	0–5 ppm/0.05 ppm NH_3–N	100 (2)	R-3680-01	R1 (1)
ARSENIC The procedure requires about 15 minutes and employs a test strip. Inorganic As+3 and As+5 are converted to arsine gas. This reacts with the test strip in a closed container and produces yellow to brown colors on the strip. The strip color is compared to a color chart to determine concentration in ppb.					
4053-02	Test Strip	<4, 4, 8, 10, 12, 14, 16, 20, 25, 30, 50, 85, 100, 150, 175, 200, 300, 400 ppb	50	R-4053-02	R1 (8)
BACTERIA See Microbiological Testing section pages 36-38.					
BLEACH [See Chlorine Bleach]					
BROMINE Bromine may be tested using color development with DPD, or by a ferrous ammonium sulfate titration in the presence of DPD indicator. The 6824 kit uses glycine to enable the user to separate bromine and chlorine. The 3624 titration kit uses one sample size to test chlorine and one to test bromine. It includes a 1:10 dilution for determination of concentrations of 100 ppm or higher.					
6955-01	DPD Tablet, Octa-Slide 2 Comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm Br	50 (1)	R-6955-01	NH (1)
6824-01	DPD Tablet, Bromine in Chlorine, Octa-Slide 2 Comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm Br	50 (3)	R-6824-01	NH (1)
3672-01	DPD Tablet, Colorimeter	0–7.0 ppm/0.05 ppm Br	100 (1)	R-3672-01	NH (5)
3624-01	FAS Chlorine or Bromine, Direct Reading Titrator	0–10 ppm/0.2 ppm Cl or Br 0-100 ppm/2 ppm Cl or Br	50 at 10 ppm (3)	R-3624-01	NH (1)

Code 7297-DR-01

To measure sodium chloride levels in pools see test strips on page 34.

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
CADMIUM A dithizone extraction of cadmium produces a pink to red color.					
7839-01	Octa-Slide 2 Comparator	0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0 ppm Cd	20 (4)	R-7839-02	HF (1)
CALCIUM (See Hardness)					
CARBON DIOXIDE A standard alkali is used to titrate samples to the phenolphthalein endpoint.					
7297-DR-01	Direct Reading Titrator	0–50 ppm/1.0 ppm CO_2	50 at 50 ppm (2)	R-7297-DR-01	R1 (1)
CAUSTIC A sample is reacted with barium to precipitate any carbonates, then is titrated with a standard acid to the phenolphthalein endpoint. The 7181 includes a 1:10 dilution, resulting in a 1 drop = 0.1% or 1 drop = 1% equivalence.					
7516-DR-02	Direct Reading Titrator	0–10%/0.2% NaOH	50 at 10% (4)	R-7516-DR-02	R1 (1)
7181-01	Dropper Bottle	1 drop = 0.1 or 1% NaOH	50 at 10% (3)	R-7181-01	R1 (1)
CHELANT Free chelant is determined by using the back titration of a hardness test, with magnesium as the titrant. Since bismuth will displace other metals from chelants, it is used for total chelant determinations. Both tests use different sample sizes to determine NTA or EDTA.					
7144-01	Free Chelant Dropper Bottle	1 drop = 2 ppm EDTA 1 drop = 2 ppm NTA	100 (3)	R-7144-01	R1 (1)
7143-01	Total Chelant Dropper Bottle	1 drop = 5 ppm EDTA 1 drop = 5 ppm NTA	100 (3)	R-7143-01	HF (1)
CHLORIDE The argentometric method is used with all kits. This employs a chromate indicator and silver nitrate titrant. Hydrogen peroxide is included with kits 7172 and 7247 to eliminate sulfite interference.					
3468-01*†	Direct Reading Titrator	0–50 ppm/1 ppm Cl^-	50 (2)	R-3468-01	NH (1)
4503-DR-02	Direct Reading Titrator	0–200 ppm/4 ppm Cl^- 0–20,000 ppm/400 ppm	50 at 200 ppm (4)	R-4503-DR-02	R1 (1)
7459-02	Salinity Direct Reading Titrator	0-20 ppt/0.4 ppt Salinity	50 at 20 ppt (2)	R-7459-02	R1 (1)
7172-02	Dropper Bottle	1 drop = 10, 25, or 50 ppm Cl^-	120 at 100 ppm (5)	R-7172-02	R1 (2)
7247-01	Dropper Bottle	1 drop = 2, 5, or 10 ppm Cl^-	120 at 10 ppm (5)	R-7247-01	R1 (1)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Chlorine - Chlorine

Code 3670-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
CHLORINE Free, Combined and Total Chlorine may be determined using DPD with either colorimetric or titrimetric methods. These determinations are generally limited to concentrations of 0–10 ppm, although the FAS titration can test higher concentrations by dilution or with the addition of more DPD indicator. Higher concentrations require the iodometric titration, whereby the sample is acidified and iodide is added, which is oxidized by chlorine to iodine and is titrated with a standard thiosulfate solution. Iodometric determinations will only test total chlorine.					
FREE & TOTAL					
3308-01*	DPD Tablet Octa-Slide 2 Comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm Cl	50 (2)	R-3308-01	NH (1)
3312-01*	DPD Tablet Octa-Slide 2 Comparator	0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0 ppm Cl	50 (2)	R-3312-01	NH (1)
3313-01*	DPD Tablet Octa-Slide 2 Comparator	1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0 ppm Cl	50 (2)	R-3313-01	NH (1)
3314-01*	DPD Tablet Octa-Slide 2 Comparator	Low: 0.1–1.0 ppm Cl High: 1.0–6.0 ppm Cl	100 (2)	R-3314-01	NH (1)
3328-01	DPD Tablet Octa-Slide 2 Comparator	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0 ppm Cl	50 (2)	R-3328-01	NH (1)
3670-01 DC1200-CL	DPD Tablet Colorimeter	0–4.0 ppm/0.05 ppm Cl	100 (2)	R-3670-01	NH (4)
3670-01-LI DC1200-CL-LI	DPD Liquid Colorimeter	0–4.0 ppm/0.05 ppm Cl	144 (3)	R-3670-01-LI	R1 (5)
DPD FREE CHLORINE, MONOCHLORAMINE, DICHLORAMINE, & TOTAL CHLORINE					
3316-01	DPD Tablet Octa-Slide 2 Comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm Cl	50 (4)	R-3316-01	NH (1)
DPD FREE, MONO & DICHLORAMINES, TOTAL CHLORINE, pH					
6980-01	DPD Tablet/ Phenol Red Tablet Octa-Slide 2 Comparator	Low: 0.1–1.0 ppm Cl High: 1.0–6.0 ppm Cl pH: 6.8–8.2	200 (5)	R-6980	NH (7)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Code 4497-01

Clean sample cells used in DPD test reactions as soon as possible. DPD can stain!

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
CHLORINE ...Continued					
DPD-FAS TITRATION FOR FREE AND TOTAL CHLORINE					
3176-02*†	Direct Reading Titrator	0–10 ppm/0.2 ppm Cl	50 at 10 ppm (4)	R-3176-02	R1 (2)
3624-01	Chlorine or Bromine Direct Reading Titrator	0–10 ppm/0.2 ppm Cl or Br 0–100 ppm/2 ppm Cl or Br	50 at 10 ppm (3)	R-3624-01	NH (1)
7514-01	FAS Dropper Bottle Titration	1 drop = 0.2 or 0.5 ppm Cl	50 (3)	R-7514-01	NH (1)
IODOMETRIC TITRATION (For higher total chlorine levels)					
4497-DR-01	Direct Reading Titrator	0–200 ppm/4 ppm Cl	50 at 200 ppm (3)	R-4497-DR-01	R2 (1)
4497-01	Dropper Pipet	1 drop = 10 ppm Cl	50 at 200 ppm (3)	R-4497-01	R2 (1)
4501-01	Dropper Pipet	1 drop = 1 ppm Cl	50 (3)	R-4501-01	R2 (1)
CHLORINE BLEACH, IODOMETRIC TITRATION					
7105-03	Direct Reading Titrator	0–10%/0.2% Cl	50 at 10% (3)	R-7105-03	R1 (2)
7894-01	Dropper Pipet	1 drop = 0.005%, 0.05%, or 0.5% Cl	50 at 0.1, 1.0, or 10% (3)	R-7894-01	R1 (1)
CHLORINE TEST PAPERS/STRIPS See other Chlorine test strips on page 34.					
4250-BJ	Chlorine Test Papers	10, 50, 100, 200 ppm, Cl	200 (1)	R-4250-BJ	NH (1)
2964-G	Chlorine Test Strips	0, 0.5, 1, 3, 5, 10 ppm, Free Cl	25 (1)	R-2964-G	
2963LR-G	Chlorine Test Strips	0, 0.1, 0.25, 0.5, 1, 3, 10 ppm, Total Cl	25 (1)	R-2963LR-G	
3031	Chlorine Test Strips	0, 50, 100, 250, 500, 800 ppm Cl	50 (1)	R-3031	
2979	Chlorine Test Strips	0, 0.5, 1, 3, 5 ppm Total Cl	50 (1)	R-2979	

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Chlorine Dioxide - Copper

Reagent Tip:
Determine when your reagent was made and bottled. The first two numbers of a lot number signify the week, the third is the year the reagent was made. Thus 506XXX was made in the 50th week of 2016. For more details see page 76.

Code 6616-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
CHLORINE DIOXIDE The colorimetric kits use DPD to determine chlorine dioxide. Glycine is added in the method to remove free chlorine interferences. Chlorite up to 1,000 ppm and chlorine up to 2 ppm will not interfere with the test strip determinations.					
3622-01	Octa-Slide 2 Comparator	0.0, 0.2, 0.6, 0.8, 1.0, 2.0, 3.0, 5.0 ppm ClO_2 (0–10 by dilution)	50 (2)	R-3622-01	NH (1)
3671-01 DC1200-CLO	Colorimeter	0–7 ppm/0.05 ppm ClO_2	100 (2)	R-3671-01	NH (3)
2999LR	Test Strip	0, 0.25, 0.50, 1.0, 3.0, 10 ppm	50	R-2999LR	NH (1)
3002	Test Strip	0, 10, 25, 50, 100, 250, 500 ppm	50	R-3002	NH (1)
CHROMATE Diphenylcarbazide reacts with chromate (hexavalent chromium) to form a red to violet color in an acid solution.					
4430-01	Diphenylcarbazide Octa-Slide 2 Comparator	5, 10, 15, 20, 25, 30, 35, 40 ppm Na_2CrO_4 *(lower or higher ranges by dilution)*	50 (1)	R-4430-01	R1 (1)
COLIFORM See also Microbiological Testing section pages 36-38.					
COLOR The color of water is measured by comparing the water to platinum cobalt color standards representing APHA Standard Color Units.					
3528-01	LRC Comparator	0, 20, 50, 80, 110, 140, 170, 200 APHA color units	Unlimited (0)	R-3528-01	NH (2)
COPPER A yellow color is formed when copper reacts with diethyldithiocarbamate (DDC). A blue color is formed when copper reacts with Cuprizone.					
6616-01	LRC Comparator	0, 0.05, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50 ppm Cu	50 (1)	R-6616-01	NH (1)
3619	Cuprizone Color Chart	0.05, 0.10, 0.15, 0.20, 0.30, 0.50, 0.70, 1.0 ppm Cu	50 (2)	R-3619	R1 (1)
3673-01 DC1200-CO	DDC Colorimeter	0–8 ppm/0.03 ppm Cu	100 (1)	R-3673-01	NH (7)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Code 6701-01

TWO CHOICES FOR REFILLS:
1. For a complete set, add "R-" to the kit number.
2. For individual reagents, order by the code on the reagent. See pages 76-83 for a list of kit reagents.

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
CYANIDE The cyanide is first reacted with a chlorine donor to form cyanogen chloride, which then reacts with pyridine-barbituric acid to form a red-blue color. The test is also applicable as a screening test for concentrations up to 250 ppm.					
7387-02	Octa-Slide 2 Comparator	0.0, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40 ppm Free CN^-	50 (5)	R-7387-02	R1 (3)
DEHA Diethylhydroxylamine reacts with ferric iron to form ferrous iron, which is then measured by a standard iron test.					
4790-01	Octa-Slide 2 Comparator	0.05, 0.1, 0.2, 0.4, 0.6, 0.8, 1.0, 1.5 ppm DEHA	100 (3)	R-4790-01	R1 (1)
DETERGENTS Anionic surfactants are extracted with toluene and break up an ion pair, releasing bromphenol blue into a water layer. A standard color reagent is then used to determine the concentration.					
4507-02	Dropper Pipet	1 drop = 1.0 ppm Detergent	60 at 5.0 ppm (3)	R-4507-02	R1 (2)
4515-01	Dropper Pipet	1 drop = 0.1 ppm Detergent	30 (4)	R-4515-01	LQ (2)
FLUORIDE A red zirconium lake reacts with fluoride to form a colorless solution, which decreases the red color of the solution in proportion to concentration.					
3674-01 DC1200-FL	Colorimeter	0–2.0 ppm/0.03 ppm F^-	100 (2)	R-3674-01	LQ (7+5)
FORMALDEHYDE The colorimetric analysis uses a modified Schiff reaction in which an acidified pararosaniline and dichlorosulfitomercurate II complex form a violet color.					
6701-01	Octa-Slide 2 Comparator	0.0, 0.5, 1.0, 2.0, 4.0, 6.0, 8.0, 10.0 ppm Formaldehyde	100 (3)	R-6701-01	LQ (2+5)
GLUTARALDEHYDE High concentrations are determined by a titration with sulfuric acid after reaction with sulfite.					
7064-01	Direct Reading Titrator	1 mL = 250 ppm Glutaraldehyde	25 (5)	R-7064-01	R2 (3)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Hardness - Hydrazine

Hardness originally referred to the ability of water to lather with soap. The more calcium and magnesium ions present, the "harder" it was to produce a lather.

Code 4482-LI-02

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
HARDNESS EDTA titration is used for all hardness determinations, with a red to blue endpoint. Both total and calcium hardness buffers include inhibitors to eliminate metal interferences. All results are as $CaCO_3$; some kits also express results as gpg. The 3609, which is recommended for salt water analysis, includes a conversion factor for Ca++. The -LI suffix indicates an all liquid kit; -LT indicates a liquid buffer and tablet indicator.					
3609-01	Fresh & Salt Water Calcium Hardness Direct Reading Titrator	0–200 ppm/4 ppm $CaCO_3$ 0-2,500 ppm by dilution	50 (3)	R-3609-01	R1 (1)
4482-DR-LI-01	Total Hardness Direct Reading Titrator	0–200 ppm/4ppm $CaCO_3$ Liquid indicator	50 at 200 ppm (3)	R-4482-DR-LI-01	R1 (1)
4482-LI-02	Total Hardness Dropper Bottle	1 drop = 10 ppm or 1 gpg $CaCO_3$ Liquid indicator	50 at 200 ppm or 20 gpg (3)	R-4482-LI-02	R1 (1)
4482-DR-LT-01	Total Hardness Direct Reading Titrator	0–200 ppm/4 ppm $CaCO_3$ Tablet indicator	50 at 200 ppm (3)	R-4482-DR-LT-01	R1 (1)
4824-LT-02	Calcium, Magnesium, Total Hardness Dropper Bottle	1 drop = 10 ppm or 1 gpg $CaCO_3$ Tablet indicator	50 at 200 ppm or 20 gpg (5)	R-4824-LT-02	R1 (1)
4824-DR-LT-01	Calcium, Magnesium, Total Hardness Direct Reading Titrator	0–200 ppm/4 ppm $CaCO_3$ Tablet indicator	50 at 200 ppm (5)	R-4824-DR-LT-01	R1 (1)
3037-DR-01	Low Range Total Hardness Direct Reading Titrator	0–10 ppm/0.2 ppm $CaCO_3$	50 at 10 ppm (3)	R-3037-DR-01	R1 (1)
7171-02	Total Hardness Dropper Bottle	1 drop = 10, 25, or 50 ppm $CaCO_3$	100 (3)	R-7171-02	R1 (1)
7246-02	Total Hardness Dropper Bottle	1 drop = 2, 5, or 10 ppm $CaCO_3$	100 (3)	R-7246-02	R1 (1)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Hydrogen Peroxide - Lead

Code 3347-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Order Code	Shipping Code (Weight/Lbs)
HYDROGEN PEROXIDE Although peroxide may be tested colorimetrically with DPD, the most common method is iodometric titration using a standard thiosulfate solution. Both methods are offered.					
7138-DB-01	Iodometric Dropper Bottle	1 drop = 5 ppm H_2O_2	50 (4)	R-7138-DB-01	LQ (2)
7150-01	Iodometric Dropper Bottle	1 drop = 0.5% H_2O_2	50 (4)	R-7150-01	LQ (2)
2984LR	Test Strips	0, 1, 3, 10, 30, 50	25 (1)	R-2984LR-H	NH (1)
IODINE As with many other oxidizers, iodine may be titrated with a standard thiosulfate solution, hence the name iodometric titration.					
7253-DR-01	Direct Reading Titrator	0–50 ppm/1 ppm I_2	50 at 50 ppm (3)	R-7253-DR-01	R1 (1)
7253-01	Dropper Pipet	1 drop = 2.5 ppm I_2	100 at 25 ppm (3)	R-7253-DR-01	R1 (1)
2948-BJ	Test Papers	12, 25, 50, 100 ppm I_2	200	R-2948-BJ	NH (1)
IRON Bipyridyl is a ferrous iron indicator that tests total iron after any ferric iron is reduced to ferrous in the sample. Ferrous and ferric may be tested separately by eliminating the reduction step. A similar ferrous indicator, 1,10 phenanthroline, is used in the DC1200 kit.					
7787-01	Total Iron LRC Comparator	0.05, 0.10, 0.20, 0.30, 0.40, 0.60, 0.80, 1.0 ppm Fe	30 (2)	R-7787-01	R1 (1)
4447-01	Total Iron Octa-Slide	0.5, 1.0, 2.0, 3.0, 4.0, 6.0, 8.0, 10.0 ppm Fe	90 (2)	R-3318	R1 (1)
3347-01	Ferrous/Ferric Iron Octa-Slide 2 Comparator	0.5, 1.0, 2.0, 3.0, 4.0, 6.0, 8.0, 10.0 ppm Fe	100 (3)	R-3347-01	R1 (1)
3681-01 DC1200-FE	Total Iron 1, 10 Phenanthroline Colorimeter	0–4.0 ppm/0.25 ppm Fe	100 (2)	R-3681-01	R1 (1)
LEAD The presence of lead in solder is detected by the reaction of a solder sample with acid and sodium rhodizonate.					
3582-01	Spot Plate *Plumbing Inspector Kit*	Yes/No	100 (3)	R-3582	R1 (2)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Manganese - Molybdenum

Molybdenum x 1.6 = Molybdate
Sodium Molybdate Dihydrate x 0.4 = Molybdenum
Molybdate x 0.63 = Molybdenum

Code 6628-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Oder Code	Shipping Code (Weight/Lbs)
MANGANESE The 1-(2-pyridylazo)-2-naphthol(PAN) method forms an orange complex with manganese. Metal interferences with the PAN method can be eliminated using the #7104 Cyanide Inhibitor Package, sold separately.					
3588-02	PAN Octa-Slide 2 Comparator	0.05, 0.1, 0.2, 0.4, 0.6, 0.8, 1.0 ppm Mn	50 (4)	R-3588-02	LQ (2)
3682-01 DC1200-MN	PAN Colorimeter	0–0.7 ppm/0.01 ppm Mn	100 (3)	R-3682-01 DC1200-MN	R3 (7+5)
MICROBIOLOGICAL TESTING See section pages 36-38.					
MOLYBDATE/MOLYBDENUM There are three colorimetric methods and one titration method available. The 6628 uses Xanthogonate to form a pink color with molybdate. Thioglycolate forms a yellow color for low to high determinations. The 3628 uses a new test strip technology that reads 0, 0.5, 1, 2 and 5 ppm. Results are available in about 1 minute. The 3632 titration employs citric acid with a red to yellow color change. The sample size may be changed to vary the equivalence.					
3628-01	Test Strip	0, 0.5, 1.0, 2.0, 5.0 ppm	50 (1)	R-3628-01	R1 (1)
6628-01	Xanthate, Sodium Molybdate Octa-Slide 2 Comparator	1, 2, 3, 4, 5, 6, 8, 10 ppm Sodium Molybdate	100 (2)	R-6628-01	R1 (1)
3346-01	Thioglycolate, Molybdate Octa-Slide 2 Comparator	30, 60, 90, 120, 150, 180, 240, 300 ppm Molybdate	50 (2)	R-3346-01	NH (1)
3160-01	Thioglycolate, Molybdenum Octa-Slide 2 Comparator	2, 5, 8, 10, 12, 15, 18, 20 ppm Molybdenum	50 (3)	R-3160-01	R3 (2)
3632-01	Molybdenum Dropper Pipet	1 drop = 2 or 20 ppm Molybdenum	50 (3)	R-3632-01	LQ (2+5)
3676-01 DC1200-MO	Thioglycolate Colorimeter	0-30 ppm/0.1 ppm Molybdenum	50 (3)	R-3676-01 DC1200-MO	R3 (7)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Nitrate Nitrogen - Nitrite, Sodium

Code 3354-01

The current EPA limit for nitrate is 10 ppm as nitrogen. Multiply nitrogen readings by 4.4 to convert reading to nitrate.

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Oder Code	Shipping Code (Weight/Lbs)
NITRATE NITROGEN The nitrate is reduced to nitrite by cadmium or zinc and this undergoes diazotization/coupling to form a pinkish color. All kits below use cadmium except #3354, which uses zinc and which also contains a reagent that eliminates nitrite interference. Kit #3519 tests both nitrate and nitrite. The kit #3119 uses one comparator that contains both nitrate and phosphate standards. The phosphate method in kit #3119 is an ascorbic acid reduction. See page 16 for Total Nitrogen Digestion Tube Test.					
3119-01	Cadmium Reduction Nitrate/Phosphate LRC Comparator	0.2, 0.4, 0.6, 1.0 ppm NO_3^-–N; 0.2, 0.4, 0.6, 1.0 ppm PO_4^{3-}	Nitrate: 40 (2) Phosphate: 50 (2)	R-3119-01	R1 (2)
3615-01	Cadmium Reduction, Nitrate/Nitrite LRC Comparator	0, 0.2, 0.4, 0.6, 0.8, 1.0 ppm NO_3^-–N	50 (2)	R-3615-01	R1 (2)
3519-01	Cadmium Reduction Octa-Slide 2 Comparator	0.25, 0.5, 1.0, 2.0, 4.0, 6.0, 8.0, 10.0 ppm NO_3^-–N	40 (3)	R-3519-01	R1 (1)
3354-01	Zinc Reduction Octa-Slide 2 Comparator	0.0, 1.0, 2.0, 4.0, 6.0, 8.0, 10.0, 15.0 ppm NO_3^-–N	50 (2)	R-3354-01	NH (2)
3677-01 DC1200-NA	Cadmium Reduction Colorimeter	0–3.0 ppm/0.05 ppm NO_3^-–N	50 (2)	R-3677-01	R1 (7)
NITRITE NITROGEN As with nitrate, above, the diazotization/coupling reaction is used to form a pink color with nitrite.					
3352-01	Octa-Slide 2 Comparator	0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.80 ppm NO_2^-–N	50 (3)	R-3352-01	NH (2)
NITRITE, SODIUM Sodium nitrite is titrated using one of two methods. After acidifying the sample, permanganate will oxidize nitrite. When all of the nitrite is oxidized, the permanganate turns the sample pink. Ceric Ammonium Nitrate (CAN) also oxidizes the nitrite in the presence of ferroin indicator. The endpoint is orange to blue. The CAN method is preferred if glycol is present.					
7101-DR-01	Permanganate Direct Reading Titrator	0–1000 ppm/20 ppm $NaNO_2$	50 at 1000 ppm (2)	R-7101-DR-01	R1 (1)
7101-01	Permanganate Dropper Pipet	1 drop = 50 or 100 ppm $NaNO_2$	50 at 1000 or 2000 ppm (2)	R-7101-01	R1 (1)
3036-DR-02	CAN Direct Reading Titrator	0–1000 ppm/20 ppm $NaNO_2$	50 at 1000 ppm (2)	R-3036-DR-02	R1 (1)
7183-02	CAN Dropper Bottle	1 drop = 50 ppm $NaNO_2$	50 at 1000 ppm (2)	R-7183-02	R1 (1)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Oxygen, Dissolved - pH

It is important in all drop titrations to hold the titrant vertically. This ensures proper drop size.

Code 5860-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Oder Code	Shipping Code (Weight/Lbs)
OXYGEN, DISSOLVED The azide modification of the Winkler method is a modified iodometric titration whereby oxygen, in the presence of a strong alkali, oxidizes manganese, which in turn reacts with iodide to form iodine. This is titrated with a standard thiosulfate solution in the presence of a starch indicator to enhance the endpoint. Azide eliminates nitrite interference.					
5860-01	All liquid reagents Direct Reading Titrator	0–10 ppm/0.2 ppm O_2	50 at 10 ppm (5)	R-5860-01	R1 (2)
OZONE DPD reacts with ozone, but any other oxidizers will interfere. The Indigo Trisulfonate method includes a step to eliminate chlorine interference, but bromine will interfere. It is preferred for the analysis of salt water samples.					
3678-01 DC1200-OZ	Indigo Trisulfonate Colorimeter	0–0.4 ppm/0.04 ppm O_3	100 (3)	R-3678-01	NH (7)
PERACETIC ACID/HYDROGEN PEROXIDE This test is a combination of two separate titrations. The first is a cerium titration of peroxide. The second is an iodometric titration of peracetic acid.					
7191-02	Dropper Bottle	1 drop = 50 ppm Peroxide 1 drop = 6, 15 or 300 ppm Peracetic Acid	50 (5)	R-7191-02	R1 (2)
PERACETIC ACID TEST STRIP					
3000	Test Strips	0, 10, 20, 50, 85, 160 ppm	50	—	NH (1)
3000LR	Test Strips	0, 5, 10, 20, 30, 50 ppm	50	—	NH (1)
3000HR	Test Strips	0, 50, 100, 250, 500, 1000	50	—	NH (1)
pH TEST PAPERS					
2907	Test Papers	6.8-8.4 pH/0.4 pH	1 Roll	—	NH (1)
2912	Test Papers	3.0-10.0 pH/1 pH	200 Strips	—	NH (1)
2953	Test Papers	4.5-7.5 pH/0.5 pH	1 Roll	—	NH (1)
2954	Test Papers	0-13 pH/1 pH	1 Roll	—	NH (1)
2956	Test Papers	1-11 pH/1 pH	1 Roll	—	NH (1)
2959	Test Papers	8-12 pH/0.5 pH	2 Rolls	—	NH (1)
3-2950	pH Indicator Sticks	0–14/1 pH	100 Strips	—	NH (1)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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pH must be controlled and monitored because it plays an essential role in almost all chemical and biological processes.

pH indicators work in a specific range. Samples with a pH above the range of an indicator may match the highest standard on the comparator; samples below the range may match the lowest standard.

Code 5858-01

See Instrument Section, pages 22-30 for pH meters.

LaMotte pH Test Kits

The "Precision Wide Range" pH kit includes the Octa-Slide comparator and reagents to provide 100 tests. Other pH test kits consist of an Octa-Slide Comparator, and a reagent for 50 tests. LaMotte Company has been supplying laboratory quality pH indicator tests to professional analysts for more than eighty years; these are the most reliable, economical pH test kits available. Simply fill the tube to the mark with the sample water, add several drops of indicator, and compare the resulting color against the eight permanent color standards in the comparator.

How To Select The Right pH Kit:

Single or Wide Range?

Single range kits cover a range of 1.4 pH units in 0.2 unit increments (0.1 unit sensitivity). Wide range kits cover pH units in increments of 0.5.

Which Range?

Choose a kit in which the midpoint of the range covered is as close to the average or optimum pH value of the sample water. If this value is unknown, choose the Precision Wide Range Kit.

Indicators specific to a particular pH range allow colorimetric determination of pH. If the water to be tested is cloudy, one may wish to use a pH meter.

Order Code	pH Indicator	Octa-Slide Comparator Color Standard Values In pH Units								Reagent Refill Oder Code	Hazard (Shipping Weight/Lbs)
pH											
2109-01	Bromthymol Blue	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	R-2109-01	NH (1)
2110-01	Phenol Red	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	R-2110-01	NH (1)
2111-01	Cresol Red	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	R-2111-01	NH (1)
2112-01	Thymol Blue	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	R-2112-01	NH (1)
5858-01	Precision Wide Range	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	R-5858-01	R1 (1)
		7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5		
2124-01	Alkaline Wide Range	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	R-2124-01	R1 (1)
3353-01	Precision Wide Range	5.0	6.0	6.5	7.0	7.5	8.0	9.0	10.0	R-3353-01	R1

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Phosphate - Phosphate

Code 3114-02

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Oder Code	Shipping Code (Weight/Lbs)
PHOSPHATE There are 3 colorimetric test methods. In two, a phosphomolybdate complex is reduced by stannous chloride or ascorbic acid to produce a blue color. In a third, phosphate forms a yellow complex with vanadomolybdate.					
3679-01 DC1200-PLR	Ascorbic Acid Colorimeter	0–3.0 ppm/0.07 ppm PO_4^{3-}	100 (2)	R-3679-01	R2 (7)
3121-02	Ascorbic Acid LRC Comparator	0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0 ppm PO_4^{3-}	50 (2)	R-3121-02	R1 (1)
3114-02	Ascorbic Acid Octa-Slide 2 Comparator	0.5, 1.0, 2.0, 3.0, 4.0, 6.0, 8.0, 10.0 ppm and 5.0, 10.0, 20.0, 30.0, 40.0, 60.0, 80.0, 100.0 ppm PO_4^{3-}	50 (2)	R-3114-02	R1 (1)
7416-02	Stannous Chloride LRC Comparator	0.05, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0 ppm PO_4^{3-}	50 (2)	R-7416-02	R1 (1)
4408-01	Stannous Chloride Octa-Slide 2 Comparator	Low: 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0 ppm PO_4^{3-} High: 10, 20, 30, 40, 50, 60, 80, 100 ppm PO_4^{3-}	50 (2)	R-4408-01	LQ (1)
7068-01	Stannous Chloride Octa-Slide 2 Comparator	Low: 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0 ppm PO_4^{3-} High: 10, 20, 30, 40, 50, 60, 80, 100 ppm PO_4^{3-}	50 (2)	R-7068-01	LQ (1)
4401-02	Vanadate Molybdate Octa-Slide 2 Comparator	10, 20, 30, 40, 50, 60, 70, 80 ppm PO_4^{3-}	50 (1)	R-4401-02	R1 (1)
PHOSPHATE (TOTAL) Polyphosphates (acid-hydrolyzable or condensed) and phosphonates (organic phosphates) are reverted using the reagents and apparatus in the 7884 Auxiliary Phosphate kit. The polyphosphates require boiling or microwaving with acid and subsequent neutralization; the phosphonates require the same, but with the addition of an oxidizer in the boiling/ microwaving step. Once reverted to orthophosphate, any of the tests in the orthophosphate section above may be used for analysis. See page 17 for Total Phosphorus Digestion Tube Tests.					HF (2)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Code 7625-01

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Oder Code	Shipping Code (Weight/Lbs)
PHOSPHONATE The Chromazurol S method may be used for Dequest (xo), Bayhibit (CAS), Belcor 575 (xo) and Belsperse 161 phosphonates (CAS). An additional liquid acid is included for very high alkalinity samples. It also includes a fluoride inhibitor reagent.					
The 7611 sulfate interference suppressor kit uses barium precipitation and filtration to eliminate sulfate from the phosphonate test.					
7625-DR-01	CAS Direct Reading Titrator	0–20 ppm/0.4 ppm HEDP/PBTC	50 at 20 ppm (5)	R-7625-DR-01	R1 (1)
7625-01	CAS Dropper Pipet	1 drop = 1.25 ppm HEDP 1 drop = 1.4 ppm PBTC	50 at 20 ppm (5)	R-7625-01	R1 (1)
7530-DR-01	XO Direct Reading Titrator	0–20 ppm/0.4 ppm NaAMP	50 at 20 ppm (5)	R-7530-DR-01	R1 (2)
7530-WT-01	XO Dropper Bottle	1 drop = 1 ppm NaAMP	50 at 20 ppm (5)	R-7530-WT-01	R1 (2)
POLYPHOSPHATES A colorimetric method is available for waters where metal interference is unlikely. An excess of iron is added to the solution containing polyphosphate. The iron is complexed and the remaining iron is determined. The polyphosphate concentration is derived from the iron concentration.					
7340-R-01	LRC Comparator	0, 3, 6, 9, 12, 15 ppm Polyphosphate	50 (3)	R-7340-R-01	R2 (1)
POLYQUAT The test is based on the reaction of the cationic polyquat with an anionic polyelectrolyte using Toluidine Blue O as the indicator. The color change is blue to purple.					
7056-01	Dropper Bottle	1 drop = 1 ppm Polyquat	100+ (5)	R-7056-01	R1 (1)
POTASSIUM Sodium tetraphenylboron reacts with potassium to form a white precipitate. The turbidity of the solution is proportional to potassium concentration which is measured in a calibrated tube.					
3138-01	Turbidity Reading Tube	6, 8, 10, 20, 30, 40, 50 ppm K^+	100 (2)	R-3138-01	R1 (1)

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QAC - Sulfate

Code 3043-DR-01

Many wood treating companies use QAC kits to monitor their products because the wood preservatives react similarly to QAC.

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Oder Code	Shipping Code (Weight/Lbs)
QAC Two methods are available. A masked bromphenol blue indicator is added to the sample and turns green. Sodium tetraphenyl-boron is added to complex the QAC and the color changes to red. This method is best suited to higher QAC concentrations. A poly-electrolytic titration, like the one used for polyquat, is used for low to high concentrations.					
3043-DR-01	BPB Direct Reading Titrator	0–500 ppm/10 ppm Alkyl dimethyl benzyl ammonium chloride	50 at 500 ppm (2)	R-3043-DR-01	NH (1)
3042-01	BPB Direct Reading Titrator	0-1,000 ppm/20 ppm 0-5,000 ppm/100 ppm with dilution	50 at 1,000 ppm (2)	R-3042-01	NH (1)
7057-01	Polyelectrolytic Dropper Bottle	1 drop = 2, 5, or 10 ppm Alkyl dimethyl benzyl ammonium chloride	100+ (5)	R-7057-01	R1 (2)
2951	Test Papers	50, 100, 200, 400 ppm	100	—	NH (1)
2951HR	Test Strips	200, 400, 600, 1000, 1500 ppm	50	—	NH (1)
SALINITY Salinity is based on the concentration of chloride. An argentometric titration with silver nitrate is used to determine the chloride concentration.					
7459-02	Direct Reading Titrator	0–40 ppt/0.4 ppt Salinity	50 at 20 ppt (2)	R-7459-02	R1 (1)
SILICA The heteropoly blue method tests for "molybdate-reactive" silica. The 4463 uses a 1:10 dilution to expand the range of the kit to 100 ppm.					
4463-01	Octa-Slide 2 Comparator	0.5, 1.0, 2.0, 3.0, 4.0, 6.0, 8.0, 10.0 ppm or 5, 10, 20, 30, 40, 60, 80, 100 ppm SiO_2	50 (4)	R-4463-01	R1 (1)
SODIUM NITRITE (See Nitrite, Sodium)					
SULFATE Barium forms a precipitate with sulfate. The turbidity formed is measured using comparator standards or a meter.					
7778-01	Tablet Octa-Slide 2 Comparator	20, 40, 60, 80, 100, 120, 160, 200 ppm SO_4^{2-}	50 (1)	R-7778-01	R1 (1)
3683-01	Colorimeter	0–100 ppm/1.0 ppm SO_4^{2-}	100 (1)	R-3683-01	R1 (6)
The 7611 sulfate interference suppressor kit uses barium precipitation and filtration to eliminate sulfate from the phosphonate test.					

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Code 7391-02

Order Code	Test System (Detailed On Pages 6-7)	Range/Sensitivity	# of Tests (# Reagents)	Reagent Refill Oder Code	Shipping Code (Weight/Lbs)
SULFIDE Both kits use the Pomeroy methylene blue method for analysis. The colorimetric method uses color standards to read total sulfide. Total, dissolved and hydrogen sulfide can be separated in the titration test. The total sulfide is determined using a color dye which is added to an unreacted sample until it matches a reacted sample. The same procedure is used for dissolved sulfide, after insoluble matter is removed by aluminum floc. Hydrogen sulfide is determined by measuring pH and multiplying the dissolved sulfide concentration by a pH correction factor.					
4456-01	Total Sulfide Octa-Slide 2 Comparator	0.2, 0.5, 1.0, 2.0, 5.0, 10.0, 15.0, 20.0 ppm S^{2-}	50 (3)	R-4456-01	R1 (1)
4630†*	Total, Dissolved & Hydrogen Sulfide Dropper Pipet	1 drop = 1.0 or 0.1 ppm S^{2-} or H_2S	70 at 10 ppm (8)	R-4630†*	LQ (10)
SULFITE An iodide-iodate titrant oxidizes sulfite to sulfate under acid conditions, until all of the sulfite is reacted. The titrant then reacts with starch to form a blue color signifying the endpoint.					
7175-DR-01	Direct Reading Titrator	0–100 ppm/2 ppm SO_3^{2-}	50 at 100 ppm (3)	R-7175-DR-01	R1 (1)
7175-01	Dropper Pipet	1 drop = 5 ppm SO_3^{2-}	50 at 100 ppm (3)	R-7175-01	R1 (1)
7132-01	Dropper Bottle	1 drop = 2, 5, or 10 ppm SO_3^{2-}	100+ (3)	R-7132-01	R1 (1)
TANNIN/LIGNIN Tungstophosphoric and molybdophosphoric acids are reduced by tannins and lignins to form a blue color.					
7831-01	Octa-Slide 2 Comparator	1, 2, 3, 4, 5, 6, 8, 10 ppm Tannin or lignin like substances	50 (2)	R-7831-01	R1 (1)
TOLCIDE PS BIOCIDE This kit was developed in cooperation with Solvay, for the determination of tetrakishydroxy-methyl phosphonium sulfate (THPS). The iodometric titration may be used for fresh or salt water in oilfields, towers, pulp and paper, etc.					
4-8776-01	Direct Reading Titrator	0-100/2 ppm THPS	60 (5)	R-4-8776-01	NH (1)
ZINC In a solution buffered to pH 9, zincon reacts with zinc to form a blue color.					
7391-02	Octa-Slide 2 Comparator	0, 1, 2, 3, 4, 6, 8, 10 ppm Zn	50 (2)	R-7391-02	NH (1)
7417-02	Octa-Slide 2 Comparator	0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.4 ppm Zn	50 (2)	R-7417-02	NH (1)

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*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Aquaculture & Aquarium Waters

Fish Farms, Hatcheries, Research, Hobbyists, Retailers, Ornamental Fish Culturists...

Fresh Water Outfit

Model AQ-2, Order Code 3633-04 (Ship Code R3; 16 lbs.)
Reagent Refill, Order Code R-3633-03 (Ship Code R3)

A complete outfit for pond fish culture, ideal for fresh water analysis. Nine critical test factors can be determined on-site, efficiently and accurately. Designed with field analysis as a priority; all reagents, components, and accessories are arranged in pre-drilled foam. Short form instructions are provided in a handy adhesive lid label for easy access. Long form instruction booklet provides detailed instructions and test kit diagram. Unit is supplied complete with labware, accessories, sampling bottle, and reagents.

Factor	Method	Range (# of Tests)
Ammonia Nitrogen	Nessler	0.2–3.0 (50)
Nitrite Nitrogen	Diazotization/Coupling	0.05–0.8 (50)
pH	Wide Range	5.0–10.0 (50)

Factor	Method	Range (# Tests)
Alkalinity, Total	Neutralization	0–200 ppm (50)
Carbon Dioxide	Neutralization	0–50 ppm (50)
Chloride	Argentometric	0–200 ppm (50)
Dissolved Oxygen	Azide Modification of Winkler Method	0–10 ppm (50)
Hardness (Total)	Complexometric	0–200 ppm (50)

Temperature	
Armored Thermometer	–5° to 45°C

Salt Water Outfit

Model AQ-4, Order Code 3635-04 (Ship Code R2; 16 lbs.)
Reagent Refill, Order Code R-3635-03 (Ship Code R2)

Provides equipment to monitor nine parameters most critical for the salt water aquaculturalist. Reagents, labware, and accessories are mounted in foam for convenient test selection and portability. Short form lid label instructions are always available for quick reference, and a long form booklet provides detailed instructions with kit diagram. Unit is supplied complete with labware, accessories, sampling bottles, and reagents.

Factor	Method	Range (# of Tests)
Alkalinity*	Neutralization	0–200 ppm (50)
Carbon Dioxide	Neutralization	0–50 ppm (50)
Dissolved Oxygen	Azide Modification of Winkler Method	0–10 ppm (50)
Salinity	Argentometric	0–20 ppt (50)

*Often referred to as carbonate hardness in aquarium industry.

Factor	Method	Range (# of Tests)
Ammonia Nitrogen	Salicylate	0.05–2.0 ppm (50)
Nitrate Nitrogen	Cadmium Reduction	0.25–10.0 pm (40)
Nitrite Nitrogen	Diazotization/Coupling	0.05–0.8 ppm (50)
pH	Wide Range	5.0–10.0 (50)

Factor	Range	Sensitivity
Armored Thermometer	–5° to 45°C	0.5°C

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Water Quality Educator Monitoring Outfit

Order Code 5870-01 (Ship Code R1; 14 lbs.)

Always the first kit recommended for beginning a water quality monitoring study. The Water Quality Educator and Monitoring Outfit provides kits for seven basic water quality test factors and exceptional support material, all housed in a rugged field carrying case.

The Monitor's Handbook, a 71-page reference guide, includes all the information needed to set up a water quality monitoring program. The handbook covers test procedures and means to interpret results.

The Water Quality Educator CD-ROM, now for PC and Macintosh computers, incorporates Quick Time™ animations, still photos, written and audio information to provide step-by-step instructions for the tests included. Students receive both visual and verbal instructions and can repeat material as often as necessary. This effective "pre-lab" activity helps prepare students for water quality testing in the field or in the classroom.

The CD also provides benchmark data for each test factor for comparison of results obtained using LaMotte test kits in the field. Students enter their results and receive information on what type of water quality is indicated by their data as well as typical causes and effects of higher and lower levels.

Factor	Range (# Tests)
pH	pH 3.0–10.5 (100)
Nitrate-Nitrogen	0–15 ppm (50)
Phosphate	0–2.0 ppm (50)
Dissolved Oxygen	0–10.0 ppm (50)
Alkalinity, Total	0-200 ppm (50)
Turbidity	0-200 JTU (50)
Temperature	–5° to 45°C

Leaf Pack Experiments Stream Ecology Kit

Order Code 5882 (Ship Code NH; 10 lbs.)

Students performing the Leaf Pack Experiments learn to design, implement, and analyze a scientific investigation by discovering how **aquatic macroinvertebrates** indicate the overall health of a stream ecosystem. The Leaf Pack Experiments Kit is totally reusable and flexible. Adaptable to varying time constraints, number of students, and grade levels, it is geographically friendly and complete. All the apparatus and guides necessary for collecting, sorting and identifying are included. The kit includes a comprehensive Instructor's Manual - featuring background material on stream ecology, a glossary, diagramed instructions, experiment ideas, and full color macroinvertebrate flash cards. ***Developed by the Stroud Water Research Center in cooperation with LaMotte Company.***

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Environmental Studies

Elementary, Secondary, Vocational, Outdoor & College Science

Plankton Net

**15" (38.1 cm) tall,
5" (12.7 cm) dia. mouth**

Order Code 1063; (2 lbs.)

Cone-shaped net of 10 mesh, 153 micron nylon cloth. Minute plankton are collected and can be observed in the removable, clear conical graduated tube. Two tubes provided. Net mouth is braced by a sturdy stainless steel ring and harness.

Kick-Net

Kick-Net, complete with poles

**Order Code 0021-P (8 lbs.)
Kick-Net only Order Code 0021 (4 lbs.)**

This 1x1 meter square, 500 micron, tan mesh net is designed to meet the requirements of groups performing US EPA Rapid Bioassessment Protocols for benthic invertebrates.

Secchi Disk

Disk with black & white quadrants & calibrated line

Order Code 0171-CL (3 lbs.)

Weighted 20 cm diameter disk has a braided stretch-resistant line marked every half meter and at every meter up to 20 meters.

Limnology Outfit

**Code 5902-02
(Ship Code R1; 13 lbs.)**

**Reagent Refill
Code R-5902-01
(Ship Code LQ; 4 lbs.)**

A popular outfit for the testing and study of freshwater systems such as ponds, lakes, wetlands, rivers, streams, etc. This field-friendly outfit contains individual test modules, water sampling bottles, three supplemental handbooks, and data sheets.

Comparator Tests

Factor	Range (# Tests)
Nitrate-Nitrogen	0.2–1.0 ppm (40)
Phosphate	0.2–1.0 ppm (50)
pH	3.0–10.0 pH (50)
Silica	0.5–10 ppm (50)

Direct Reading Titrator Tests

Factor	Range (# Tests)
Carbon Dioxide	0–50 ppm (50)
Dissolved Oxygen	0–10 ppm (50)
Hardness	0–200 ppm (50)

Marine Science Outfit

**Code 5903-03
(Ship Code R1; 13 lbs.)**

**Reagent Refill
Code R-5903-02
(Ship Code R1; 4 lbs)**

For testing and study of saline systems – oceans, bays, salt marshes, etc. Includes the ***Lab Manual for Marine Science, Investigating Water Problems*** and data sheets.

Colorimetric Tests

Factor	Range (# Tests)
pH	3–10 (50)
pH	7.7–8.4 (50)

Titration Tests

Factor	Range (# Tests)
Dissolved Oxygen	0–10.0 ppm (50)
Hardness	0–200 ppm (50)
Carbon Dioxide	0–50 ppm (50)
Alkalinity	0–200 ppm (50)
Salinity	0–20 ppm (50)

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The Tour Series

Each Tour is a complete, hands-on, science curriculum with safe, simple TesTabs® tablet tests. Each Tour includes lecture materials, illustrated handouts, teacher tips, test procedures, TesTab reagents, data sheets, and games to reinforce key concepts. The Tour Series is designed for grades 4 through 8 environmental science education. The Goal of the Tour series is for students to discover, examine, measure, and compare physical and chemical properties. Students learn basic analytical methods while performing a scientific investigation.

Shore Tour

Shore Tour, Order Code 5939 (Ship Code NH; 5 lbs.)
Reagent Refill, Order Code R-5939 (Ship Code NH; 1 lb.)

Five units teach students through classroom lectures and activities how their everyday actions affect the ocean. Topics include an introduction to coastal ecosystems, oil spills, shoreline development and marine debris. Includes teacher tested activities from EPA, NOAA, and The Marine Mammal Center, links to activities and information from ocean experts, CD with printable handouts, data sheets, and more. Materials for 40 students working in groups.

Watershed Tour

Watershed Tour, Order Code 5419 (Ship Code NH; 4 lbs.)
Reagent Refill, Order Code R-5419 (Ship Code NH; 1 lb.)

A classroom-based tour of a virtual watershed, designed for teachers who are unable to visit a stream with their students. Students will "test" four stations along a river continuum to study how the river changes and how human activities can influence water quality. Developed by the Stroud Water Research Center in cooperation with LaMotte Company. Materials for 30 students working in groups.

Topsoil Tour

Topsoil Tour, Order Code5425-01 (Ship Code NH; 4 lbs.)
Reagent Refill, Order Code R-5425-01 (Ship Code NH; 1 lb.)

Investigate the physical and chemical properties of soil. Each student on the Topsoil Tour completes seven units while conducting his/her own soil tests for soil texture, pH, nitrogen, phosphorus, and potassium. Tablets and sample test bags for 50 students.

Pondwater Tour

Pondwater Tour, Order Code 5418 (Ship Code R1; 4 lbs.)
Reagent Refill, Order Code R-5418 (Ship Code R1; 1 lb.)

A great introduction to the study and measurement of changes in the water quality of a lake, stream, pond, aquarium, or even a fish bowl. Tests are included for pH, dissolved oxygen, nitrate, and ammonia. Students test variables and investigate natural processes that create changes in water quality. Tablets and sample test bags for 50 students.

Tapwater Tour

Tapwater Tour, Order Code 3608 (Ship Code NH; 4 lbs.)
Regent Refill, Order Code R-3608 (Ship Code NH; 1 lb.)

An exciting investigation of water quality examining the chemical properties of water directly from the tap. Students learn the relationships between good and poor water quality while examining the pH, chlorine, hardness, copper, and iron of tapwater from their homes. Tablets and sample test bags for 50 students. Ideal for educational outreach for public health/utilities.

Call For Our Science Education Products Catalog

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Environmental Studies

Elementary, Secondary, Vocational, Outdoor & College Science

AP® Water Quality Assessment Package

Order Code 5845-PKG (Ship Code NH (1)

The AP® Environmental Science WATER QUALITY ASSESSMENT PACKAGE is an extensive curriculum that uses the exploration of the Water Quality Index to teach students STEM-based skills that they will apply through classroom and field activities to satisfy Section VI (Water Pollution) of the AP® Environmental Topics Outline.

In a culminating field activity, students utilize appropriate techniques and instrumentation to identify their watershed and perform chemical and biological analyses to determine the water quality index of a local waterway.

The following environmental concepts are covered: watersheds, Water Quality Index, physical, chemical and biological water quality parameters, nutrient loading, hydrological variables, watershed ecology, remediation measures, and point, non-point pollution sources.

In four classroom activities, students use actual data from the Kansas River watershed to:

- Perform independent research
- Analyze data
- Create spreadsheets
- Calculate the water quality index
- Generate graphs
- Collect data
- Perform statistical analysis
- Access real-time hydrological data
- Locate local watersheds
- Observe environmental systems
- Communicate accurately

The Teacher Resource CD-ROM (included with the Water Quality Index Module) contains:

- Teacher/Student guide
- Water Quality Test Procedures
- STEM Extension Activities
- Chemical Reactions
- Data Spreadsheets
- Glossary
- Graphics Files
- PowerPoint Presentations and Quick Time iPad/iPod Videos

Also includes a **Free LaMotte BioPaddle Colony Identification App** which lets users capture the BioPaddle image to compare the "unknown" microbe growth on the BioPaddle to a library of photos of "known" microbe colonies.

Water Quality Assessment Curriculum Module, Code 5845 (sold separately)

- Nutrient – TTC/MacConkey BioPaddles (Code 5553) for coliform testing
- Salt/TDS/Temp Tracer (Code 1749-01) for temperature and TDS determination
- Teacher Resource CD-ROM

Water Quality Educator, Code 5870-01 (See page 57)

- Thermometer, Armored, Code 1066
- Dissolved Oxygen Kit, Code 5860-01
- pH Kit, Code 5858-01
- Nitrate-Nitrogen Kit, Code 3354-01
- Phosphate Kit, Code 3121-02
- Turbidity Kit, Code 7519-01
- Alkalinity Kit Code 4491-DR-01

Earth Force Low-Cost Water Monitoring Kit

Order Code 3-5886 (Ship Code NH; 1 lb.)

A popular, economical tool for learning the basics of water quality. Students will have fun analyzing sample water for pH, Dissolved Oxygen, Biochemical Oxygen Demand, Temperature, Turbidity, Nitrate, Phosphate, and Coliform Bacteria. Includes a manual with step-by-step diagramed instructions and easy-to-use laminated color chart. All the necessary apparatus and non-hazardous TesTabs to test ten water samples (three samples for Coliform). Ideal for educational outreach.

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Food Sanitizer Kits

For Caustic Soda

Model TK-10, Order Code 8225-01 (Ship Code R2; 2 lbs.)
Reagent Refill, Order Code 8228-H (Ship Code R2; 2 lbs.)

This simple, single-reagent dropper pipet kit measures caustic soda for cleaning dairy bottles, cans, storage tanks, etc. Reagents for 50 tests. Kit uses neutralization test method. Dilution step permits measurement of two ranges:

- 0.25%/drop caustic soda by weight
- 0.01%/drop sodium oxide

Also Available...

Factor	Order Code	Method	Range (# Test)	Ship Codes
Sulfuric Acid	8205	Neutralization	0.05 oz. per gal/drop (50)	R2
Chlorine	4497-01	Iodometric	10 ppm/drop (50)	R2
Chlorinated Cleaner	8226-01	Neutralization	0.01% NaOH/drop (50)	R2

Standard pH Test Papers

Order Code	pH Range
2907	6.8–8.4
2912	3.0–10.0
3-2950	0-14
2953	4.5–7.5

Order Code	pH Range
2954	0–13
2956	1–11
2959	8–12

Sanitizer Test Papers and Strips

Chemically treated paper strips change to indicate sanitizer level. Strips and color chart are packaged in a waterproof plastic vial. 2951 is specifically formulated to read all types of QAC.

Test Papers

Factor	Code (Qty.)	Range
Chlorine	4250-BJ (200)	10, 50, 100, 200 ppm
Iodine	2948-BJ (200)	12, 25, 50, 100 ppm
QAC	2951 (100)	50, 100, 200, 400 ppm
High Range QAC	2951-HR (50)	200, 400, 600, 1000, 1500 ppm

Look for additional chlorine, iodine, & QAC kits in the Individual Test Kit section

Test Strips (50 test per vial)

Factor	Code (Qty.)	Range
Peracetic Acid	3000 (50)	0, 10, 20, 40, 60, 85, 160
Peracetic Acid, Low Range	3000LR (50)	0, 5, 10, 20, 30, 50
Peracetic Acid, High Range	3000HR (50)	0, 50, 100, 250, 500, 1000
QAC	3072-J (100)	0, 100, 200, 300, 400, 500 ppm
High Range Chlorine	3031 (50)	0, 50, 100, 250, 500, 800 ppm
Dual Range QAC	2934 (50)	LR: 0, 10, 20, 40, 80 ppm HR: 0, 100, 200, 400, 800 ppm

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Food/Laundry

Dairy Producers, Food Processors, Commercial Launderers

Laundry Outfit

For control of water supplies, cleaning operations, and rinses

Model LDR, Order Code 3095-02 (Shipping Code LQ)

Seven important factors for monitoring incoming water supplies, break, suds and bleach operations; also rinse and sour operations. The pH (alkaline) test uses a LaMotte Octet Comparator. The alkalinity tests, chlorine bleach and hardness test utilize dropper pipet test methods. Reagents are supplied for 50 tests of each factor.

Factor	Range	Application
pH (Alkaline)	pH 10.0–11.4	Break-suds-bleach solutions
pH (Sour)	pH 1.5–8.5	Sour rinse solutions
Alkalinity (Suds)	100 ppm/drop	Free/total alkalinity in break-suds-bleach solutions
Alkalinity (Rinse)	10 ppm/drop	Total alkalinity in rinses

Factor	Range	Application
Chlorine Bleach	0.5%/drop	Available chlorine in bleach solutions
Hardness	10 ppm or 1 gpg/drop	Water Supply
Turbidity	Yes/No (Soil)	Presence of soil in solution

Also Available...

Code	Description	Ship Codes
7250-02	P Alkalinity 1 drop = 10 ppm or 100 ppm Total Hardness 1 drop = 1 gpg Chlorine Strips 10, 50, 100, 200 ppm	R2
7196-01	Chlorine 1 drop = 10 ppm Oxygenated Bleach 1 drop = 10 ppm	R2
3541-01	Spot test for presence/absence of Chlorine and Iron. Wide Range pH	R1
7894-01	High Range–1 dr = 0.5% Cl_2 Mid Range–1 dr = 0.05% Cl_2 Low Range–1 dr = 0.005% Cl_2	R1

7250-01

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SMART Water Analysis Laboratory

MODEL SCL-05, Order Code 1951-02 (Shipping Code LQ; 37 lbs.)

Reagent Refill, Order Code R-1951 (Shipping Code LQ; 10 lbs.)

This portable lab measures 24 water quality parameters for pollution detection, environmental studies, and industrial water and wastes. The SMART3 digital colorimeter analyzes test sample color reactions and provides direct readouts for 15 factors. Titration tests performed with LaMotte's Direct Reading Titrators provide results directly in ppm for 6 additional factors. Digital meters measure pH and conductivity.

See specifications on next page.

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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General Water Analysis

Laboratories, Government Agencies

Colorimeter Tests

Factor	Method	Range (# Test)
Ammonia	Nesslerization	0–4.0 ppm (50)
Chlorine	DPD	0–4.0 ppm (100)
Bromine	DPD	0–9 ppm (100)
Iodine	DPD	0–16 ppm (100)
Chromium (Hexavalent)	Diphenylcarbazide	0–1.0 ppm (100)
Copper	Diethyldithiocarbamate	0–6.0 ppm (100)
Fluoride	SPADNS	0–2.0 ppm (50)
Iron	Bipyridyl	0–6.0 ppm (50)
Nitrate	Cadmium Reduction	0–3.0 ppm (20)
Nitrite	Diazotization/Coupling	0–0.8 ppm (20)
Phosphate	Ascorbic Acid Reduction	0–3.0 ppm (50)
Silica	Heteropoly Blue	0–4.0 ppm (50)
Sulfate	Barium Chloride	0–100 ppm (50)
Sulfide	Methylene Blue	0–1.5 ppm (50)
Turbidity	Absorption (No Reagents)	0–400 NTU (∞)

Titration Tests

Factor	Method	Range (# Test)
Alkalinity	Neutralization	0–200 ppm (50 at 200 ppm)
Carbon Dioxide	Neutralization	0–50 ppm (50 at 50 ppm)
Chloride/Salinity	Argentometric	0–200 ppm 50 at 200 ppm)
Dissolved Oxygen	Azide Modification of Winkler Method	0–10 ppm (50 at 10 ppm)
Hardness (Calcium, Magnesium, & Total)	Complexometric	0–200 ppm (50 at 200 ppm)

pH/Conductivity Instruments

Factor	Code	Model	Range # Test)
pH	5-0034-01	pH5	pH 0–14
Conductivity	5-0038-02	CON5	0.0–19.99 mS

Also Available...

Description	Code	Model	Ship Code (Wgt.)
Model SMART 3 Colorimeter, ***without*** pH & Conductivity Lab Meters	1991-01	SCL-04	LQ (34 lbs.)
Reagent Refill	R-1991		LQ (10 lbs.)

See the full line of products for this industry
lamotte.com

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Combination Buret Outfits

In addition to our other standard products, LaMotte also packages combination buret style outfits. These outfits are packaged in cases made of rugged ABS plastic in sizes to fit three to five burets and accessories. The automatic burets and accessories are mounted in plastic clips over a white plastic workshelf in one half of the cabinet. The other half of the case is equipped with foam-lined shelves to hold additional tests or accessories. Colorimetric and titrimetric tests may be added to the buret titrations.

To order, simply choose the desired test reagents from the list on page 66 and select any additional tests from the A - Z section (pages 39-55) or the instrumentation section (pages 8-33). Squeeze valve (pinchcock) style burets are standard equipment with these kits, but glass or Teflon® stopcock burets may be ordered for an additional charge.

Model AB-152

Order Code 7643-01 (Ship Code LQ)

Factor	Method	Equivalence (# Tests)
pH	Alkaline Wide Range	pH 8.5–12 (50+)
Phosphate	Stannous Chloride	0–10 / 0–100 ppm (50+)

Factor	Method	Equivalence (# Tests)
Alkalinity	Neutralization	1 mL = 1.0 mg (50+)
Chloride	Argentometric	1 mL = 0.5 mg (50+)
Hardness	Complexometric	1 mL =6 0.25 mg (50+)
Sulfite	Iodometric	1 mL = 1.0 mg (50+)

Model AB-153

Order Code 7644-02 (Ship Code LQ)

Factor	Method	Equivalence (# Tests)
Molybdenum	Xanthate	1–10 ppm Sodium Molybdate (50+)
pH	Phenol Red	pH 6.8 – 8.2 (50+)
pH	Alkaline Wide Range	pH 8.5 – 12 (50+)
Phosphate	Stannous Chloride	0–10 / 0–100 ppm (50+)

Factor	Method	Equivalence (# Tests)
Alkalinity	Neutralization	1 mL = 1.0 mg (50+)
Chloride	Argentometric	1 mL = 0.5 mg (50+)
Phosphonate	Complexometric	1 mL = 0.2 mg (50+)
Sulfite	Iodometric	1 mL = 1.0 mg (50+)

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Industrial Waters

Water Treatment Companies, Engineers, Consultants

Industrial Titration Reagents

Factor	Order Code	Reagent
Alkalinity	2246	Phenolphthalein
	2786	Total Alkalinity Indicator
	6068	Sulfuric Acid, 0.02N
	6111	Sulfuric Acid, 0.1N
Chloride	4069	Chromate Indicator, 5%
	8848	Silver Nitrate, 0.0282N
	6346	Silver Nitrate, 0.0141N
	6168	Silver Nitrate, 0.0171N
Hardness	4259	Ca Buffer (w/ metal inhibitors)
	T-5250	Ca Indicator Tablets
	4483	Total Buffer (w/ inhibitor)
	4484	Total Indicator Tablets
	6261	EDTA, 0.01M
Sulfite	6385	Starch Acid Indicator Powder
	7329	Iodide Iodate, N/40
	6106	Iodide Iodate, N/80
	4556	Iodide Iodate, N/63
	8667	Iodide Iodate, N/126

Dependable LaMotte reagents are available in a wide variety of sizes. Call Customer Service for assistance.

See the full line of products for this industry
lamotte.com

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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- So simple, anyone can use it!
- Just fill disk with sample and Spin
- All test results in 60 seconds
- Precise wet chemistry
- Pre-measured reagents and sample amounts

For more information scan the code shown here or go to **www.lamotte.com/spin** for videos and more information.

WaterLink® Spin Lab

Code 3576

A revolutionary new in-store lab is here! Now let the innovative WaterLink® Spin photometer do all your pool and spa water testing for you. Just fill one unique Spin reagent disk with water and vital tests are done automatically.

In just 60 seconds all the test results are transferred into the DataMate 10 software on your computer and analyzed to display results and recommend precise treatment instructions. Remove the disk and you're ready for the next customer.

This ground-breaking analysis system is so simple anyone can use it. Each sealed reagent disk contains the precise amount of reagent needed to run a complete series of tests. No measuring water, no mixing, no prep time or cleanup.

Chlorine Disk, Order Code 4330-H (50/pk)										
	Free Chlorine (ppm)	Total Chlorine (ppm)	Bromine (ppm)	pH (pH)	Calcium Hardness (ppm)	Total Alkalinity (ppm)	Cyanuric Acid (ppm)	Copper (ppm)	Iron (ppm)	Borate (ppm)
Range	0 to 15	0 to 15	0 to 33.0	6.3 to 8.6	0 to 1200	0 to 250	5 to 150	0 to 3.0	0 to 3.0	0 to 60

Biguanide Disk, Order Code 4331-H (50/pk)								
	Biguanide (ppm)	Biguanide Shock (ppm)	pH (pH)	Calcium Hardness (ppm)	Total Alkalinity (ppm)	Copper (ppm)	Iron (ppm)	Borate (ppm)
Range	0 to 70	0 to 250	6.3 to 8.6	0 to 1200	0 to 250	0 to 3.0	0 to 3.0	0 to 60

Ship Codes: [NH] Non-Hazardous Material - No Fees · [R1] Small Qty. Hazardous Material - No Fees · [LQ, R2, R3] Hazardous Material - Air Fees Only · [HF] Hazardous Material - Air & Ground Fees
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Pool & Spa Waters

Professionals, Public Operators, Private Owners

Insta-TEST® Plus Strips

The Insta-TEST® 3, PRO400, and 5-way pool and spa test strips are the only strips of their kind that do not require any specific waiting period. Just dip the strip in the pool or spa for accurate and reliable results. The 3-way test strip measures for Free Chlorine or Bromine, Alkalinity and pH all on one strip. The 5-way test strip measures Free Chlorine or Bromine, Total Chlorine, Alkalinity, pH and Total Hardness. Both are sold in vials containing 50 strips. The PRO400 provides 100 strips and measures the Free Chlorine or Bromine, Total Chlorine, pH and Alkalinity. The PopTop bottle features a patented desiccant liner covering its base and sides, which provides substantially better moisture protection and eliminates the need for a loose desiccant bag. Another feature is the hinged cap, which eliminates the problem of loose caps getting wet. Each bottle has a 30 month shelf life. Individual units are available through local retailers, which can be found on our website www.lamotte.com/insta.

The Sodium Chloride Insta-TEST® strip is an easy one step procedure for measuring Sodium Chloride in salt-water pools. Just dip and read to get results in only 20 seconds. The strip measures salt water pool samples over the range of 1,500 to 5,000 ppm. Each bottle contains 50 strips in a convenient, black PopTop bottle. A desiccant liner inside the bottle protects the strips from moisture intrusion and UV light.

The Wide Range pH and Total Chlorine Insta-TEST® strip identifies how far out of range a pool or spa sample may be, before a variety of treatment chemicals and test reagents are consumed. The Wide Range strip provides quick and reliable results in just 15 seconds. The strips are designed to measure Total Chlorine from 0 to 50 ppm and pH from 4 to 10.

See pages 34-35 for additional test strips.

PopTop bottles make Insta-TEST® strips even easier!

Code	Model	Free Chlorine	Bromine	Total Chlorine	Alkalinity	pH	Total Hardness	Salt	Case Pack Size	Ship Code
2976	Insta-TEST 3 Plus	0 to 10	0 to 20	—	0 to 240	6.2 to 9.0	—	—	12, 24 or 100	NH
2977	Insta-TEST 5 Plus	0 to 10	0 to 20	0 to 10	0 to 240	6.2 to 9.0	50 to 800	—	12 or 100	NH
2978	Insta-TEST PRO 400 Plus	0 to 10	0 to 20	0 to 10	0 to 240	6.2 to 9.0	—	—	12 or 100	NH
2998	Insta-TEST Salt	—	—	—	—	—	—	1500 to 5000	12 or 100	NH
2987-G	Insta-TEST Wide Range pH/Total Chlorine	—	—	0 to 50	—	4 to 10	—	—	12	NH

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DipCell Series

The LaMotte DipCell color comparator is available in a competitive lineup of kits for the pool operator and service pro.The DipCell comparator is simple to use. Just dip the comparator into the water to get a sample, add reagents, cap, mix, and read chlorine and pH immediately. Six color standards are provided for wide-range chlorine from 0.5-10.0 ppm. The six standards included for pH range from 6.8 - 8.2.

- A wide range chlorine DipCell measures Chlorine from 0.5 - 10 ppm
- Removable wall dividers inside the carrying case permit an easy upgrade to larger 60 mL reagent sizes
- "Handle-Top" carrying case is compact and rugged (7½" x 4½")
- Liquid DPD and Phenol Red offered in large volumes to do 144 or 288 tests
- Color-coded instructions and reagents simplify analysis
- Separate titration tube for Alkalinity and Hardness avoids cleaning pH cell before each test
- Handbook included

Code/Model	Free Chlorine	Total Chlorine	pH	Calcium Alkalinity	Calcium Hardness	Acid Demand	Base Demand	Cya	Ship Code
7011-01/ DT-3	0.5-10.0	0.5-10.0	6.8-8.2	(This kit includes 50 DPD tablets for each Chlorine test)				—	NH
# of Tests	50	50	144	—	—	—	—	—	
7013/DL-51	0.5-10.0	0.5-10.0	6.8-8.2	1 drop = 10 ppm	1 drop = 20 ppm	Drop count	Drop count	0-100	R1
# of Tests	144	144	144	70±	70±	70±	70±	50	
7014/DL-60	0.5-10.0	0.5-10.0	6.8-8.2	1 drop = 10 ppm	1 drop = 20 ppm	Drop count	Drop count	—	R2
# of Tests	288	288	288	140±	140±	140±	140±	—	

Pool MGR. Series

All Tablet · Octa-Slide

Our rugged all tablet kit for the public pool operator. The precise Octa-Slide Comparator system is used to comply with regulatory standards. The Pool MGR. Series includes diagramed instructions, saturation index calculator, water quality handbook, and the eight-standard Octa-Slide Comparator system for chlorine and pH, all in a tough, blow molded carrying case. The Pool MGR. tablet series is supplied with sufficient tablet reagents for 50 tests for Free Chlorine, Total Chlorine, and pH. Tablet reagents for 20 tests are provided for Alkalinity, Hardness, and Cyanuric Acid.

Code/Model	Free Chlorine	Total Chlorine	pH	Total Alkalinity	Calcium Hardness	Acid Demand	Cyanuric Acid	Ship Code
3366-BR-01/PM-41-BR	Bromine	0-10.0	6.8-8.2	60-400	60-400	Calc.	–	NH
3366-01/PM-41	0.2-3.0	0.2-3.0	6.8-8.2	60-400	60-400	Calc.	–	NH
3366-NJ-01/PM-41-NJ	0.5-10.0	0.5-10.0	6.8-8.2	60-400	60-400	Calc.	–	NH
3368-01/PM-51	0.2-3.0	0.2-3.0	6.8-8.2	60-400	60-400	Calc.	0-100	NH
3368-NJ-01/PM-51-NJ	0.5-10.0	0.5-10.0	6.8-8.2	60-400	60-400	Calc.	0-100	NH
3368-ABC-01/PM-51-NJ	0.5-10.0	0.5-10.0	6.8-8.2	60-400	60-400	Acid/Base drop titration	0-100	NH
# of Tests	50	50	50	20	20	Calc. From Alk test result	20	NH

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Pool & Spa Waters

Professionals, Public Operators, Private Owners

PRO250

Our professional water analysis kits are supplied in durable, cases for years of dependable service. Each unit features liquid reagent systems for chlorine and pH (capable of 280+ tests each). The liquid DPD reagent system is provided to monitor chlorine, while pH is tested with a single liquid indicator. Total Alkalinity, Calcium Hardness, Acid and Base Demand are analyzed with drop count titrations. Cyanuric Acid is measured by turbidity. The PRO250 PLUS outfit includes all of the above plus Copper and Iron tests.

Every PRO250 SERIES kit includes color-coded caps to prevent mixups and diagramed instructions to make testing a breeze. The Pool MGR. Water Quality handbook and saturation index calculator are also included. See the chart below for specifications.

Code/Model	Free Chlorine	Total Chlorine	pH	Total Alkalinity	Calcium Hardness	Acid & Base Demand	Cya	Copper	Iron	Ship Code
7001-NJ-01/ PRO250-NJ	0.2-3.0 & 0.5 -10.0	0.2-3.0 & 0.5 -10.0	6.8-8.2	1 drop = 10 ppm	1 drop = 20 ppm	Drop count	0-100	–	–	R2
7002-NJ-01/ PRO250 PLUS-NJ	0.2-3.0 & 0.5 -10.0	0.2-3.0 & 0.5 -10.0	6.8-8.2	1 drop =1 0 ppm	1 drop = 20 ppm	Drop count	0-100	0.1-1.0	0.1-1.0	R2
# of Tests	288	288	288	140+	140+	70 each	100	50	50	

ColorQ PRO 9 TESTAB® KIT

Model PRO 9, Order Code 2069 (Ship Code R1; 4 lbs.)

The unique, multi-test ColorQ hand-held photometer reads NINE pool and spa test factors directly on a digital display. Featuring an innovative dual-optic design, the ColorQ provides more accuracy and more test factors. The ColorQ eliminates the need to visually determine slight color variations or use look-up tables, thus taking the guesswork out of poolside water analysis.

Test Factor	Range	Method
Free Chlorine (DPD)	0-10.0 ppm	Colorimeter
Total Chlorine (DPD)	0-10.0 ppm	Colorimeter
Bromine (DPD)	0-22.0 ppm	Colorimeter
pH	6.5-8.5 pH	Colorimeter
Calcium Hardness	0-400 ppm	Colorimeter
Total Alkalinity	0-250 ppm	Colorimeter
Iron	0-3.0 ppm	Colorimeter
Copper	0-4.0 ppm	Colorimeter
Cyanuric Acid	0-125 ppm	Colorimeter

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

DPD TesTabs® – All new packaging for easier use!

As the only North American manufacturer of DPD tablets, LaMotte has replaced traditional foil-on-foil strip packaging with blister-style foil packaging. The user can dispense each tablet into a small vial by pressing the tablet through the foil. This eliminates the need to manually tear open a foil packet and carefully dispense the tablet. The package carries the customary 10 tablets per strip in a compact 3.35" x 1.35" size. In addition to the convenient package, the DPD #1R rapid dissolving formula for measuring Free Chlorine has been enhanced for faster dissolution. Listed below are visual grade tablets.

	Quantity/Order Code			
Tablet	50	100	1000	Ship Code
Chlorine DPD #1 Rapid	6999A-H	6999A-J	6999A-M	NH
Chlorine DPD #3 Rapid	6905A-H	6905A-J	6905A-M	NH
Chlorine DPD #4 Rapid	6899A-H	6899A-J	6899A-M	NH
pH (Phenol Red)	6915A-H	6915A-J	6915A-M	NH
Alk Test	3920A-H	3920A-J	3920A-M	NH
Cyanuric Acid	6994A-H	6994A-J	6994A-M	NH
Calcium Hardness	6846A-H	6846A-J	6846A-M	NH
MPS-OUT (Monopersulfate Eliminator)	6911A-H	6911A-J	N/A	NH

See page 31 for instrument tablets

DPD Liquid Reagents

The liquid alternative to DPD tablets can be used with existing LaMotte chlorine comparators or colorimeters. DPD 1A and DPD 1B are added to a 5 or 10 mL sample to test Free Available Chlorine. DPD 3 is added to the reacted sample to measure Total Chlorine. Liquid reagents are also available to measure pH, Hardness, Alkalinity, and Copper.

30 mL(1 oz.)	Code	Ship Code
DPD 1A	P-6740-G	NH
DPD 1B	P-6741-G	R2
DPD 3	P-6743-G	NH

60 mL (2 oz.)	Code	Ship Code
DPD 1A	P-6740-H	NH
DPD 1B	P-6741-H	R2
DPD 3	P-6743-H	NH

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

Water & Wastewater

Municipal & Industrial Water & Wastewater Systems

HydraFrac Water Screening Kit

Order Code 7627 (Ship Code HF, R1; 25 lbs.)

The HydraFrac Water Analysis Test Kit is suitable for the measurement of possible residuals associated with oil and natural gas development processes, industrial activities, or agricultural operations in surface or groundwater. The test kit provides a simple, portable method for obtaining instant water quality data for 15 parameters that could be associated with groundwater and surface water contamination. Expandable to over 80+ tests using the SMART3 colorimeter (see page 8-9, 17-18 for more details about the SMART3).

Factor	Method	Range (# Tests)
Acidity	Dropper Bottle	1 drop = 0.1 or 1%
Alkalinity	Test Strip	0 to 240 ppm (25)
Ammonia	Test Strip	0 to 6 ppm (25)
Barium	Barium Chloride	0 to 200 ppm (50)
Chloride	Argentometric	0 to 30 ppm (50)
Chromium	Diphenylcarbohydrazide	0 to 1 ppm (50)
Hardness	Test Strip	0 to 180 ppm (25)
Iron	Test Strip	0 to 5 ppm (25)
Nitrate	Test Strip	0 to 200 ppm (25)
Nitrite	Test Strip	0 to 10 ppm (25)
pH	Test Strip	0 to 14 pH (25)
Sulfate	Barium Chloride	0 to 100 ppm (100)

Factor	Method	Range (# Tests)
Instrumentation		
Dissolved Oxygen	Tracer Instrument	0 to 20 ppm
pH/EC/TDS	Tracer Instrument	0 to 14 pH; 0 to 19.99 mS; 0 to 999 ppm

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

STORMWatch MS4 Water Screening Kit

Order Code 7449 MS4 Water Screening Kit
(Also available as individual reagent kits)

Order Code 7450 IDDE Accessory Kit

Instrumentation and reagent systems are currently available to provide a preliminary screening of storm water outflow, and determine whether it is contributing to the overall pollutant load as it relates to inorganic constituents. In many cases these measurements can be made near the source, using handheld instrumentation, test kits, and/or reagents.

Features

- **Fast** - Most tests can be completed in under 2 minutes
- **Easy** - All kits and meters come with easy-to-follow instructions
- **Unique Design** - All-in-one kit that puts your testing needs together in one easy to transport carrying case!

Scan here to see our Stormwater MS4 Guidance video

Test Factor	Range (# Tests)
Ammonia	1.0 to 8.0 ppm (50)
Boron*	0 to 0.80 ppm (50)
Chlorine*	0 to 4 ppm (144)
Copper*	0 to 7 ppm (50)
Fluoride*	0 to 2 ppm (50)
Hardness	1 drop=10, 25 or 50 ppm (100)
Phenols*	0 to 6 ppm (50)
Potassium	6 to 50 ppm (100)
Surfactants*	0 to 8 ppm (100)

*Only available in Order Code 7450

Meters	Range
Color	0 to 200 cu
Conductivity	0 to 199.9 µS/cm
pH	0.00 to 14.00 pH
Turbidity	0 to 500 FAU
TDS	0 to 999 ppm

Corrosion Control Kit

Model CCK, Order Code 7436-01 (Ship Code R1; 7 lbs.)
Reagent Refill, Order Code R-7436-01 (Ship Code R1)

By determining corrosive conditions in water supplies, this test kit supports a water supplier's lead in drinking water abatement program. Each unit includes tests for P and T alkalinity, calcium hardness, temperature, pH, phosphates, and total dissolved solids. Calculate saturation index by the Langelier method to indicate the corrosive conditions in water supplies. The Model CCK Corrosion Control kit is packaged in a portable carrying case for on-site use.

Factor	Method	Range (# Tests)
Calcium Hardness	Complexometric	0–200 ppm(50)
P & T Alkalinity	Neutralization	0–200 ppm (50)
Orthophosphate	Ascorbic Acid	0.5–10 ppm (50)
Temperature	———	–5° to +45°C (Unlimited)
Corrosion Index	———	By calculation via chart (50)

Meters	Range
Waterproof pH 1 PockeTester	0–14 pH
Waterproof TDS 1 PockeTester	10–1990 ppm

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Water Conditioning

Residential & Commercial Water Treatment Specialists

Customize Your Water Quality Sales Demonstrations. Choose the Softener that Meets Your Needs!

LaMotte Model AT-Q Digital and AT Visual series outfits are the most popular and effective sales tools for on-site demonstrations. The tests clearly demonstrate the benefits between untreated and treated water.

AT-Q Digital Series

Featuring the ColorQ DW digital colorimeter

- New digital versions
- New rugged case with locks
- Fast & simple tests
- More custom options
- Competitive pricing

AT-Q with Model S · Code 4-3051-01

AT-Q with DuoSoft · Code 4-3055-01

AT-Q with DirectFlo · Code 4-3071-01

AT-Q with DirectFlo DuoSoft · Code 4-3075-01

AT-Q Digital Kit Tests (9 Included)

	Hardness	pH	Iron	Nitrate	Chlorine Free & Total	Sulfide	Precipitation	Soap Consumption
Range	1-41 gpg*	5-9	0-3.0 ppm*	0-25	0-10 ppm	0-3.0 ppm*	Before/After	Before/After
Resolution	1 gpg	0.5 pH	0.5	1 ppm	0.2 ppm	0.2 ppm	—	
# of Tests	140	70	50	50	50	120	100	100

*Higher Concentrations by dilution; instructions included.

AT Visual Series

AT with Model S · Code 4-3003-02

AT with DuoSoft · Code 4-3015-01

AT with DirectFlo · Code 4-3010-01

AT with DirectFlo DuoSoft · Code 4-3018-01

AT Visual Kit Tests (5 Included)

	Hardness	pH	Iron	Precipitation	Soap Consumption
Range	1 drop = 10 ppm/1 gpg	5.0-10 ppm	0.5-10* ppm	Before/After	Before/After
# of Tests	100	100	100	100	100

*Higher Concentrations by dilution; instructions included.

Optional Add-On Kits and TDS Meter:

Chlorine (0.2-3.0 ppm), 50 Tests; Code **4-3006**

Nitrate (0-15 ppm), 50 Tests; Code **4-3004**

TDS Meter, Code **5-0080** (see page 26)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
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Demonstration Softener Units

Model S

Order Code 1002
- Single chamber
- Filled with resin

Duo-Soft™

Order Code 1022
- Dual chamber
- Shipped empty

Order Code 1022-FLD
- Dual chamber
- Filled with carbon and resin

DirectFlo

Order Code 1026
- Hose Free
- Single chamber
- Filled with resin

DirectFlo DuoSoft

Order Code 1028
- Hose Free
- Dual chamber
- Filled with carbon and resin

Please visit www.lamotte.com for details

Water Quality Outfit

Model AR-42, Order Code 3590-03 (Ship Code R1, 7 lbs.)

The simplest, most economical way to measure several water quality factors with a single, portable outfit. Ideal for service applications. Easily customized for your particular analytical needs.

Tests for pH, hardness, iron, and sulfide. Includes reagents for 50 tests each for pH, hardness, and sulfide; 100 tests for iron.

Factor	Method	Range (# Tests)
pH	Wide Range	pH 5.0–10.0 (50)
Iron	Bipyridyl	0.5–10.0 ppm (100)
Hardness	Titration	1 drop = 10 ppm/1 gpg (50)
Sulfide	Pomeroy	0.2–20.0 ppm (50)

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty. Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees
*(NPDWR) EPA Accepted · †(NPDES) EPA Accepted · Direct Reading Titrators have a specific range, but may be refilled to test higher concentrations.

How to use this section:

The reagent code number is followed by a letter which indicates the container size supplied for that reagent. The following table shows how those letters correspond to container sizes - milliliters for liquids and grams fo powder. When ordering a reagent, please include the appropriate letter suffix with the reagent code number to indicate the container size.

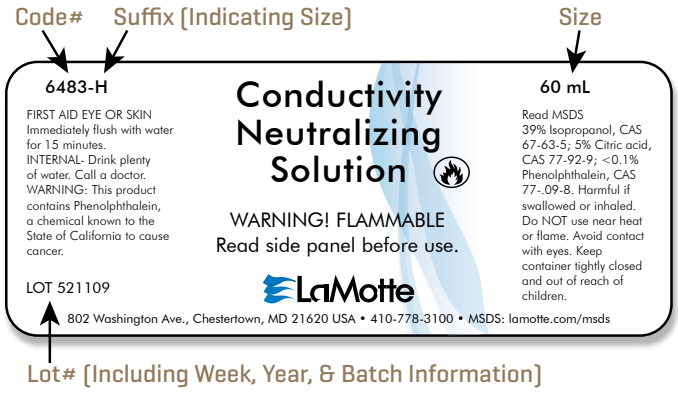
EXAMPLE: To order a 60 mL bottle of Phenol Red Solution (Reagent Code Number 2211), use the letter "-H", and order by code number "2211-H".

NOTE: A reagent is available only in the sizes indicated under the kit's listing in this section.

How to Determine Reagent Manufacture and Expiration Dates

On the lower, left corner of the label of each LaMotte reagent is a six (sometimes seven), digit number. This is not a code number, but the lot number of that reagent. A lot number records the date of manufacture and identifies the reagent as part of a specific batch of reagent produced on that date. The first two digits of the lot number identify the week, and the third digit identifies the year of manufacture.

If the shelf-life of your reagent is unknown, one year from the date of manufacture is still a good rule of thumb.



-A	1	1mL	1 gram
-B	2	2 mL	2 grams
-C	5	5 mL	5 grams
-D	10	10 mL	10 grams
-E	15	15 mL	15 grams
-F	20	20 mL	20 grams
-G	30	30mL	30 grams
-H	60	60mL	60 grams
-J	120	120mL	120 grams
-K	250	250-285mL	1200-500 grams
-L	500	470-525mL	450-500 grams
-M	1000	950-1000mL	—-
-N	—-	3800mL	—-

Kit Code	Reagent #	Description
2036	2220-H	Range Finding Indicator
2081-02	2218-G	Wide Range
	2212-G	Cresol Red
2109-01	2210-G	Bromthymol Blue
2110-01	2211-G	Phenol Red
2111-01	2212-G	Cresol Red
2112-01	2213-G	Thymol Blue
	2214-G	Oleo Red B
2124-01	2303-G	Alkaline Wide Range
3036	6410-E	Ferroin
	6411PS-H	Nitrite DRT
3037-DR-01	4483-E	Hardness 5
	4257-H	Hardness Titration
	6522-E	CM Indicator
3043-DR-01	6413-E	QAC Indicator
	6412-H	Titration Reagent
3095-02	6434-H	Hypochlorite Indicator
	7941PS-H	Hypochlorite Reagent C
	2301-G	Nitro Green Indicator
	4483-E	Hardness Reagent 5
	4485-E	Hardness Reagent 6
	4487PS-H	Hardness Reagent 7
	2246-E	Phenolphthalein
	2230-E	Methyl Orange Indicator
	6130PS-H	Hydrochloric Acid 1N
	6323-H	Hydrochloric Acid 0.1N
	6432-H	Sour Indicator
3110-01	V-6278-H	Mixed Acid
	V-6279-C	Nitrate Reducing
3114-02	V-6282-G	Phosphate Acid
	V-6283-C	Phosphate Reducing
3119-01	V-6278-J	Mixed Acid
	V-6279-C	Nitrate Reducing
	V-6282-H	Phosphate Acid
	V-6283-C	Phosphate Reducing
3121-02	V-6282-G	Phosphate Acid
	V-6283-C	Phosphate Reducing
3138-01	6364-C	Tetraphenylboron
	7745-E	Sodium Hydroxide
3152-01	6155-E	Sodium Thiosulfate
	6165-D	Xylenol Orange
	6025-E	Hydrochloric Acid
	6158PS-H	Thorium Nitrate
3160-01	6484-H	Molybdenum Buffer
	6485-H	Molybdenum Oxidizing
	6486-S	Molybdenum Indicator
3176-02	6807-C	DPD 1
	6905-H	DPD 3R
	6815-G	Ferrous Ammon. Sulfate
	6495-E	Control Reagent

Kit Code	Reagent #	Description
3304-01	3978LWT-H	Salicylate Ammonia #1
	3979WT-G	Salicylate Ammonia #2
	3982WT-G	Salicylate Ammonia #3
3308-01	6999-H	DPD 1R
	6905-H	DPD 3R
3312-01	6999-H	DPD 1R
	6905-H	DPD 3R
3313-01	6999-H	DPD 1R
	6905-H	DPD 3R
3314-01	6999-J	DPD 1R
	6905-J	DPD 3R
3316-01	6905-6999	DPD 1, DPD 3
	6904-6906	DPD 2, DPD 4
3328-01	6999-H	DPD 1R
	6905-H	DPD 3R
3346-01	3962-H	Molybdate 1 HR
	3963-H	Molybdate 2 HR
3347-01	4450-G	Iron Reagent 1
	4451-S	Iron Reagent 2 Powder
	4453-S	Ferrous Iron Reagent
3352-01	V-6278-J	Mixed Acid Reagent
	V-6281-C	Color Developing Reagent
3354-01	2799-H	Nitrate 1
	NN-3703-H	Nitrate 2
3363-01	6915-H	Phenol Red
	6905-6999	DPD 1, DPD 3
3363-NJ-01	6915-H	Phenol Red
	6905-6999	DPD 1, DPD 3
3366-01	6905-6999	DPD 1, DPD 3
	6915-3box	pH, Alk, Hard
3366-BR-01	6999-J	DPD 1R
	6915-3box	pH, Alk, Hard
3368-01	6905-6999	DPD 1, DPD 3
	3920-4box	pH, Alk, Hard, CYA
3456-01		
3467-01	3870-E	Alkalinity Indicator 1
	3869-E	Alkalinity Indicator 2
	4493DR-H	Alkalinity B
3468-01	4069-E	Chloride A
	4070-H	Chloride B
3509-03	4483-E	Hardness Reagent 5
	4484-J	Hardness Reagent 6 Tablets
	4487WT-H	Hardness Reagent 7
	4450-E	Iron Reagent 1
	4451-S	Iron Reagent 2 Powder
	2218	Wide Range Indicator
3519-01	V-6278-J	Mixed Acid
	V-6279-C	Nitrate Reducing
	V-6281-C	Color Developing

Kit Code	Reagent #	Description
3541-01	6381-G	Hydrochloric Acid
	4100-G	O-Tolidine
	5116WT-G	Ferric Iron Test
	9078WT-G	Sour Indicator
3569-01	3943-H	Aluminum 1
	3944-H	Aluminum 2
3582-01	3951-E	Lead A
	3945-E	Lead C
	3946-J	Lead Indicator
3588-02	4255-H	Hardness Buffer
	3956-G	Manganese
	6203-J	Chloroform
	2785-E	Metal Inhibitor
3609-01	4259-E	Sodium Hydroxide
	T-5250-H	Calcium Hardness
	4487DR-H	Hardness 7
3615-01	V-6278-K	Mixed Acid
	V-6279-D	Nitrate Reducing
3619	P-6367-E	Copper A
	P-6368-E	Copper B
3622-01	6903-H	DPD #1 Tablets
	6811-E	Glycine Solution
3624-01	6807-C	DPD 1
	6905-H	DPD 3R
	3992DR-H	Chlorine/Bromine
3628-01	7646-G	Molybdenum Buffer
3632-01	3997-J	MO Buffer
	3998-H	Denatured Alcohol
	3999-H	MO Titrant
	4001-S	Carbazone
3633-04	4797WT-G	Ammonia Nitro. 1
	4798WT-G	Ammonia Nitro. 2
	2218-G	Wide Range, pH 3
	V-6278-H	Mixed Acid
	V-6281-D	Color Developing
	2311-Eg-E	BCG-MR Indicator
	4493DR-H	Alkalinity B
	2246-E	Phenolphthalein
	4504-E	Chloride 1
	4505DR-H	Chloride 2
	6090-E	Sulfuric Acid
	4483-E	Hardness 5
	4485-E	Hardness 6
	4487DR-H	Hardness 7
	4169-H	Sodium Thiosulfate
	4167-G	Mang. Sulfate
	7166-G	Alk. Pot. Iodide-Azide
	6141WT-G	Sulfuric Acid
	4170PS-G	Starch Indicator
	4253DR-H	Carbon Dioxide B

Kit Code	Reagent #	Description
3634-04	4797WT-G	Ammonia Nitrogen 1
	V-6278-H	Mixed Acid
	V-6281-D	Color Developing
	2311-Eg-E	BCG-MR Indicator
	4493DR-H	Alkalinity B
	2246-E	Phenolphthalein
	4504-E	Chloride 1
	4505DR-H	Chloride 2
	6090-E	Sulfuric Acid
	4483-E	Hardness 5
	4485-E	Hardness 6
	4487DR-H	Hardness 7
	4253DR-H	Carbon Dioxide B
	4798WT-G	Ammonia Nitro. 2
3635-04	2218-G	Wide Range pH 3
	3978LWT-H	Salicylate Ammon. 1
	3979WT-G	Salicylate Ammon. 2
	3982WT-G	Salicylate Ammon. 3
	V-6278-J	Mixed Acid
	V-6281-C	Color Developing
	V-6279-C	Nitrate Reducing
	2311-Eg-E	BCG-MR Indicator
	4493DR-H	Alkalinity Titration B
	2246-E	Phenolphthalein
	4253DR-H	Carbon Dioxide B
	7460-E	Salinity Indicator A
	7461-H	Salinity Titration B
	4169-H	Sodium Thiosulfate
	4167-G	Mang. Sulfate
	7166-G	Alkaline Pot. Iodide-Azide
	6141WT-G	Sulfuric Acid
	4170PS-G	Starch Indicator
3639-SC	4004WT-G	Sodium Hydroxide
	6364-C	Tetraphenylboron
3640-SC	T-3808-H	Copper Tablets
3641-01-SC	7865-C	Aluminum Inhibitor
	7866-J	Aluminum Buffer
	7867-J	Aluminum Indicator
	7868-E	Aluminum Complex.
3642-SC	V-4797-G	Ammonia Nitro. 1
	V-4798-G	Ammonia Nitro. 2
3643-SC	6903-J	DPD 1
	6197-J	DPD 3
	6811-E	Glycine
3644-SC	6903-J	DPD 1
	6811-E	Glycine
3645-SC	V-6276-D	Chromium Rgt.
3646-SC	6446-E	Copper 1
3647-02-SC	3875-G	Acid Zirconyl Spadns
	4128-G	Sodium Arsenite

Kit Code	Reagent #	Description
3648-SC	V-4450-G	Iron 1
	V-4451-C	Iron 2
3649-SC	V-6278-H	Mixed Acid
	V-6279-C	Nitrate Reducing
3650-SC	V-6278-H	Mixed Acid
	V-6281-C	Color Developing
3651-SC	3989-G	Indigo Blue Solution
	3990-E	Chlorine Inhibitor
	3991-K	Ozone Buffer
3653-SC	V-6282-H	Phosphate Acid
	V-6283-C	Phosphate Reducing
3654-02-SC	V-4458-G	Sulfide A
	V-4459-E	Sulfide B
	4460-H	Sulfide C
3655-SC	4410-H	Phosphate Rgt.
3656-01-SC	4842-D	Reagent B
	4841-H	Hydrazine A
3658-01-SC	3956-G	Manganese Indicator
	4255-G	Hardness Buffer
	6565-E	Sodium Cyanide
3659-01-SC	3978-H	Salicylate Ammon. 1
	7457-D	Salicylate 2
	7458-C	Salicylate 3
3660-01-SC	6130-E	Hydrochloric Acid
	4004-E	Sodium Hydroxide
	2850PS-H	Cyanide Buffer
	2794DS-C	Cyanide CL
	2793DS-C	Cyanide Indicator
3661-01-SC	4856-K	Cyanuric Acid Rgt.
3662-SC	6452-G	Hydrogen Peroxide 1
	6454	Hydrogen Peroxide Tabs
3663-01-SC	6251PS-H	Hydrochloric Acid
	6253-K	Sodium Citrate
	6254-H	Dimethylglyoxime
	6537-H	Ammonium Hydroxide
	6566-G	Ammonium Pers
	6346WT-G	Silver Nitrate
3664-SC	V-4466-G	Silica 1
	V-4467-G	Silica 2
	V-4468-G	Silica 3
	V-6284-D	Silica 4
3665-SC	V-6277-D	Sulfate Rgt.
3666-01-SC	7833-G	Tannin 1
	7834-H	Tannin 2
3667-01-SC	6314-G	Zinc Indicator
	6315-G	Zinc Buffer
	6565-E	Sodium Cyanide
	6316-D	Sodium Ascorbate
	5128-G	Formaldehyde
	6319-J	Methyl Alcohol

Kit Code	Reagent #	Description
3668-SC	2776-E	Acid Phenanthroline
	2777-C	Iron Reducing
3669-SC	6310-D	Manganese Buffer
	6311-E	Manganese Periodate
3670-01	6903-J	DPD 1
	6197-J	DPD 3
3670-LI-01	P-6740-G	DPD 1A
	P-6741-G	DPD 1B
	P-6743-G	DPD 3
3671-01	6903-J	DPD 1
	6811-E	Glycine
3672-01	6903-J	DPD 1
3673-01	6446-G	Copper 1
3674-01	3875-J	Acid Zirconyl SPADNS
	4128-H	Sodium Arsenite
3676-01	6485-G	Molybden. Oxidizing
	3997-H	MO Buffer
	6486-S	Molybdenum Indicator
3677-01	V-6278-J	Mixed Acid
	V-6279-D	Nitrate Reducing
3678-01	3989-G	Indigo Blue Solution
	3990-E	Chlorine Inhibitor
	3991-K	Ozone Buffer
3679-01	V-6282-H	Phosphate Acid
	V-6283-D	Phosphate Reducing
3680-01	V-4797-G	Ammonia Nitrogen 1
	V-4798-G	Ammonia Nitrogen 2
3681-01	2776-E	Acid Phenanthroline
	2777-C	Iron Reducing
3682-01	4255-J	Hardness Buffer
	3956-G	Manganese Indicator
	6565-E	Sodium Cyanide
3683-01	V-6277-D	Sulfate Rgt.
3687-SC	V-4466-G	Silica 1
	V-4467-G	Silica 2
	4468-E	Silica 3
3688-SC	4167-G	Manganous Sulfate
	7166-G	Alkaline Pot. Iodide-Azide
	6141WT-G	Sulfuric Acid
3698-SC	7681-H	Sulfuric Acid
	V-6276-D	Chromium Rgt.
	7683-E	Sodium Azide
	7682-G	Potassium Permanganate
	5115PT-H	Deionized Water
3699-03-SC	3997-G	MO Buffer
	6485-G	Molybdenum Oxidizing
	6486-S	Molybdenum Indicator
3700-01-SC	V-2209-H	TRL Chlorphenol Red
	V-2304-H	TRL Phenol Red
	V-2213-H	TRL Thymol Blue

Kit Code	Reagent #	Description
4-3003-01	4450-G	Iron 1
	4451-S	Iron 2
	2218-G	Wide Range Indicator
	4767-H	Soap 4
	4542-H	Precip A
	4543-H	Precip B
	4483WT-H	Hardness 5
	4484-J	Hardness 6
	4487WT-H	Hardness 7
4-8776-01	4133	DSP Reagent 10%
	4135	Borate Buffer
	4134	PSSA Reagent 5%
	4170	Starch Indicator
	6377	Iodine Solution 0.025N
	3843	Zinc Acetate 2.0N
4031-01	4032	Ammonia Chloride Buffer
	6565	Sodium Cyanide 10%
	4033	PAR Indicator
	4022	Stabilizing Reagent
4401-02	4410-G	VM Phosphate
4408-01	6405-G	Reducing Rgt.
	4410-H	VM Phosphate
4430-01	4431-G	Chromate Indicator
4447-01	4450-G	Iron 1
	4451-S	Iron 2
4456-01	4458-G	Sulfide A
	4459-E	Sulfide B
	4460-H	Sulfide C
4463-01	4571-G	Silica 1
	4467-E	Silica 2
	4468-E	Silica 3
	6405-C	Reducing Rgt.
4482-DR-LI-01	4483-E	Hardness 5
	4485-E	Hardness 6
	4487DR-H	Hardness 7
4482-DR-LT-01	4483-E	Hardness 5
	4484-J	Hardness 6
	4487DR-H	Hardness 7
4482-LI-02	4483-E	Hardness 5
	4485-E	Hardness 6
	4487WT-H	Hardness 7
4482-LT-02	4483-E	Hardness 5
	4484-J	Hardness 6
	4487WT-H	Hardness 7
4491-DR-01	T-2311-H	BCG-MR Indicator
	4493DR-H	Alkalinity Titration B
4497-01	4498WT-H	Chlorine 1
	4499WT-H	Chlorine 2
	4500PA-H	Chlorine 3

Kit Code	Reagent #	Description
4497-DR-01	4498WT-H	Chlorine 1
	4499WT-H	Chlorine 2
	4500DR-H	Chlorine 3
4501-01	4498-E	Chlorine 1
	4499-E	Chlorine 2
	3819-H	Sodium Thiosulfate
4503-DR-02	4504-E	Chloride 1
	2246-E	Phenolphthalein
	6090-E	Sulfuric Acid
	4505DR-G	Chloride 2
4507-02	4508-G	DS Indicator
	4509-H	pH Adjustment
	4513-E	DS Reference
4515-01	7444-H	Detergent Reagent 1
	6037-J	Detergent Reagent 2
	7445-J	Detergent Reagent 3
4533-01	T-2246-J	Phenolphthalein
	T-2311-J	BCG-MR Indicator
	4493PS-H	Alkalinity Titration B
4533-DR-01	T-2246-J	Phenolphthalein
	T-2311-J	BCG-MR Indicator
	4493DR-H	Alkalinity Titration B
4630	4633-H	Sulfide Test 1
	4634-H	Sulfide Test 2
	4635-H	Sulfide Test 3
	4636-H	Sulfide Test 4
	4636-J	Sulfide Test 4
	4637-S	Sulfide Test 5
	4638-S	Sulfide Test 6
	4639-H	Sulfide Test 7
	4640-H	Sulfide Test 8
4766		
4783-03	4483-E	Hardness 5
	4484-J	Hardness 6
	4487WT-H	Hardness 7
	4450-G	Iron 1
	4451-S	Iron 2
	2218-G	Wide Range
4790-01	4791-E	DEHA 1
	4792-E	DEHA 2
	4793-E	DEHA 3
4801-DR-01	4802DR-H	TDS A
	4803DR-H	TDS B
	2299-E	Methyl Orange
4824-DR-LT-01	4259-E	Sod. Hydroxide
	T-5250-H	Calcium Hardness
	4483-E	Hardness 5
	4484-J	Hardness 6
	4487DR-H	Hardness 7

Kit Code	Reagent #	Description
4824-LT-02	4483-E	Hardness 5
	4484-J	Hardness 6
	4487WT-H	Hardness 7
	4259-E	Sod. Hydroxide
	T-5250-H	Calcium Hardness
5858-01	2218-G	Wide Range Indicator
5860-01		
5864-01	3968A-H	Ammonia #1 Tab
	3969A-H	Ammonia #2 Tab
5921-03		
6616-01	6446-E	Copper 1
6628-01	6630-D	Molybdenum Rgt.
	6381-G	Hydrochloric Acid
6701-01	6697-J	Formaldehyde 1
	6698-C	Formaldehyde 2
	6699-J	Formaldehyde 3
6824-01	6811-E	Glycine
	6905-H	DPD 3R
	6977-J	Bromine Tablets
6896-01	6999-J	DPD 1R
	6915-H	Phenol Red
6955-01	6977-H	Bromine Tablets
6980-01	6999	DPD 1R
	6904	DPD 2R
	6905	DPD 3R
	6899	DPD 4R
	6915	Phenol Red
7001-NJ-01	P-6740-H	DPD 1A
	P-6741-H	DPD 1B
	P-6743-H	DPD 3
	P-7026-H	Phenol Red
	6994-J	Cyanuric Acid
	P-7028-G	Alk 1 Indicator
	P-6111-H	Alk Titrant
	P-4259-H	Hard 1
	P-7030-G	Hard 2
	P-7031-H	CaHard Titrant
	P-6068-E	Acid Demand
	P-6460-E	Base Demand
7611	6117-G	Barium Chloride 10%

Kit Code	Reagent #	Description
7002-NJ-01	P-6740-H	DPD 1A
	P-6741-H	DPD 1B
	P-6743-H	DPD 3
	P-7026-H	Phenol Red
	6994-J	Cyanuric Acid
	P-7028-G	Alk 1 Indicator
	P-6111-H	Alk Titrant
	P-4259-H	Hard 1
	P-7030-G	Hard 2
	P-7031-H	CaHard Titrant
	P-6068-E	Acid Demand
	P-6460-E	Base Demand
	P-4450-E	Iron 1
	T-4451-H	Iron 2
	P-6446-E	Copper 1
7011-01	6905-6999	DPD 1, DPD 3
	P-7026-G	Phenol Red
7013	P-6740-G	DPD 1A
	P-6741-G	DPD 1B
	P-6743-G	DPD 3
	P-7026-G	Phenol Red
	6994-HRB	Cyanuric Acid
	P-6068-E	Acid Demand
	P-6460-E	Base Demand
	P-7028-G	Alk 1 Indicator
	P-6111-G	Alk Titrant
	P-4259-G	Hard 1
	P-7030-G	Hard 2
	P-7031-G	CaHard Titrant
7014	P-6740-H	DPD 1A
	P-6741-H	DPD 1B
	P-6743-H	DPD 3
	P-7026-H	Phenol Red
	P-6068-G	Acid Demand
	P-6460-G	Base Demand
	P-7028-G	Alk 1 Indicator
	P-6111-H	Alk Titrant
	P-4259-H	Hard 1
	P-7030-G	Hard 2
	P-7031-H	CaHard Titrant
7056-01	7125-H	Polyquat Titrating
	2258-E	Phenolphthalein
	6090-E	Sulfuric Acid
	3995-G	Toluidine Blue 0
	7117-H	EDTA
7057-01	3996-H	Quat Titrating
	3995-G	Toluidine Blue 0
	7117-H	EDTA
	2258-E	Phenolphthalein
	6090-E	Sulfuric Acid

Kit Code	Reagent #	Description
7064-01	6289-H	Sulfuric Acid
	6289WT-H	Sulfuric Acid
	5168-J	Sodium Hydroxide
	2246-E	Phenolphthalein
	7114-H	Glut. Test Powder
	5175PT-K	Distilled Water
7068-01	4606-H	Phosphate A
	4607-J	Phosphate B/C
7101-01	7102-G	Nitrite 1
	7103PS-H	Nitrite 2
7101-DR-01	7102-G	Nitrite 1
	7103DR-H	Nitrite 2
7105-03	7939PS-G	Hypochlorite A
	2790-H	Hypochlorite D
	6809-D	Potassium Iodide
7132-01	2258-E	Phenolphthalein
	6385-D	Starch Acid
	2779WT-H	Iodide Iodate
7138-DB-01	6809-D	Potassium Iodide
	4170WT-G	Starch Indicator
	7139-H	Peroxide Titrant
	7140-H	Acidified Catalyst
7143-01	2780-D	T.C. Indicator
	6025-H	Hydrochloric Acid
	2781WT-H	T.C. Titrant
7144-01	4483-G	Hardness 5
	4485-E	Hardness 6
	2782WT-H	Free Chelant Titrant
7150-01	6809-D	Potassium Iodide
	4170WT-G	Starch Indicator
	7456WT-H	Peroxide Titrant
	7140-H	Acidified Catalyst
7171-02	4483WT-G	Hardness 5
	4485-G	Hardness 6
	2783WT-H	Hardness 10
7172-02	6091WT-G	Hydrogen Peroxide
	4069WT-G	Chloride A
	6090WT-G	Sulfuric Acid
	2258-E	Phenolphthalein
	3824WT-G	Silver Nitrate
7175-01	7327-E	Sulfite A
	7328-E	Sulfite B
	7329PS-H	Sulfite C
7175-DR-01	7327-E	Sulfite A
	7328-E	Sulfite B
	7329DR-H	Sulfite C
7181-01	5649WT-G	Hydrochloric Acid
	2258-E	Phenolphthalein
	6117-G	Barium Chloride

Kit Code	Reagent #	Description
7182-01	5648-G	Sodium Hydroxide
	2258-E	Phenolphthalein
7183-02	6410-E	Ferroin
	2789WT-G	Can Solution
7191-02	6141WT-G	Sulfuric Acid
	6410-E	Ferroin
	5650LWT-G	Hydrogen Peroxide
	6521-G	Potassium Iodide
	S-6155-H	Peracetic Acid Titrant
7196-01	6434WT-G	Hypochlorite
	4500WT-H	Chlorine 3
	6452-G	Hydrogen Peroxide 1
7240-02	2258-E	Phenolphthalein
	2786-E	Total Alkalinity
	7748WT-G	Sulfuric Acid
7246-02	2788WT-G	Hardness 2
	4483WT-G	Hardness 5
	4485-G	Hardness 6
7247-01	6091WT-G	Hydrogen Peroxide
	4069WT-G	Chloride A
	6090WT-G	Sulfuric Acid
	2258-E	Phenolphthalein
	6421WT-H	Silver Nitrate
7250-02	2246-G	Phenolphthalein
	4250-BJ	Chlorine Test Papers
	4483-G	Hardness 5
	4485-G	Hardness 6
	2783WT-H	Hardness 10
	6323WT-H	Hydrochloric Acid
	6130WT-H	Hydrochloric Acid
7253-01	7254-E	Iodine 1
	7255-E	Iodine 2
	6406PS-H	Iodine 3
7253-DR-01	7254-E	Iodine 1
	7255-E	Iodine 2
	6406DR-H	Iodine 3
7297-DR-01	2246-E	Phenolphthalein
	4253DR-H	Carbon Dioxide B
7340-R-01	7342-H	PPK A
	7343-H	PPK B
	7344-H	PPK C
7387-02	6130-E	Hydrochloric Acid
	4004-E	Sodium Hydroxide
	2850PS-H	Cyanide Buffer
	2794DS-C	Cyanide CL
	2793DS-C	Cyanide Indicator
	2955	pH Test Paper
7391-02	7393-G	Zinc Rgt.
	7361-E	Zinc Conditioning

Kit Code	Reagent #	Description
7416-02	4410-G	VM Phosphate
	6405-G	Reducing Rgt.
7417-02	7393-G	Zinc Rgt.
	7361-E	Zinc Conditioning
7436-01	3870-E	Alkalinity 1
	3869-E	Alkalinity 2
	4493DR-H	Alkalinity Titration B
	4259-E	Sod. Hydroxide
	T-5250-H	Calcium Hardness
	4487DR-H	Hardness 7
	V-6282-H	Phosphate Acid
	V-6283-C	Phosphate Reducing
	2881-H	pH 7.00 Buffer
7446	6446-G	Copper 1
	6899-J	DPD 4R
	7825-D	Aminoantipyrine
	7826-H	Ammonium Hydroxide
	7827-J	Pot. Ferricyanide
	7444-H	Detergent 1
	6037-J	Detergent 2
	7445-J	Detergent 3
7459-02	7460-E	Salinity A
	7461DR-G	Salinity B
7514-01	6807-C	DPD 1
	6905-H	DPD 3R
	3992WT-H	Chlorine/Bromine
7515-01	T-2246-J	Phenolphthalein
	T-2311-J	BCG-MR Indicator
	6117-G	Barium Chloride
	6102PS-H	Alkalinity Titrant
7516-DR-02	5115PT-H	Deionized Water
	6073-G	Barium Chloride
	2246-E	Phenolphthalein
	6251DR-G	Hydrochloric Acid
7519-01	7520-H	Standard Turbidity
7530-DR-01	6130-E	Hydrochloric Acid
	6155-E	Sodium Thiosulfate
	6165-D	Xylenol Orange
	6158PS-H	Thorium Nitrate
	3929-E	Fluoride Inhibitor
7530-WT-01	6130-E	Hydrochloric Acid
	6155-E	Sodium Thiosulfate
	6165-D	Xylenol Orange
	6158WT-H	Thorium Nitrate
	3929-E	Fluoride Inhibitor
7625-01	6155-E	Sodium Thiosulfate
	6323-E	Hydrochloric Acid
	3964-E	Chrome Azurol S
	3965-H	Thorium Nitrate
	6130-E	Hydrochloric Acid

Kit Code	Reagent #	Description
7625-DR-01	6155-E	Sodium Thiosulfate
	6323-E	Hydrochloric Acid
	3965-H	Thorium Nitrate
	6130-E	Hydrochloric Acid
	3964-E	Chrome Azurol S
7634-DC-01	6130-E	Hydrochloric Acid
	6155-E	Sodium Thiosulfate
	6158PS-H	Thorium Nitrate
	2202-G	Meta Cresol Purple
	6165-D	Xylenol Orange
7634-DR-01	2202-G	Meta Cresol Purple
	6130-E	Hydrochloric Acid
	6155-E	Sodium Thiosulfate
	6165-D	Xylenol Orange
	6158PS-H	Thorium Nitrate
7778-01	6456-H	Sulfate Turb
7787-01	4450-G	Iron 1
	4451-S	Iron 2
7791-DR-02	2786-E	Total Alkalinity
	6111DR-H	Sulfuric Acid
	6248DR-H	Sodium Hydroxide
	4483-E	Hardness 5
	4484-J	Hardness 6
	4487DR-H	Hardness 7
7802	6251PS-H	Hydrochloric Acid
	6537-H	Ammonium Hydroxide
	6253-J	Sodium Citrate
	6254-H	Dimethylglyoxime
	6566-G	Ammon. Persulfate
	6346-G	Silver Nitrate
	5115PT-J	Deionized Water
7824	7826-G	Ammon. Hydroxide
	7827-H	Pot. Ferricyanide
	7825-C	Aminoantipyrine
7831-01	7833-E	Tannin 1
	7834-H	Tannin 2
7884	7885-H	Sulfuric Acid
	7886-J	Sodium Hydroxide
	2246-E	Phenolphthalein
	6566-G	Ammon. Persulfate
	5115PT-J	Deionized Water
	7888-D	Boiling Stones
7894-01	7939PS-G	Hypochlorite A
	7940-G	Hypochlorite B
	7941PS-H	Hypochlorite C
8205	8215-H	Acid Titration
	2786-E	Total Alkalinity
8225-01	8228-H	TK-10 Rgt.

Kit Code	Reagent #	Description
8226-01	8230PA-H	Chl. Cleaner 1
	8233PA-H	Chl. Cleaner 2
	8234PA-H	Chl. Cleaner 3

Beakers - BOD

Beakers

Glass beakers have thick, slightly flared top, with spout designed for excellent pouring. Designed from ASTM specifications E960, type I requirements. All sizes have marking area and white graduated volume scale.

Thomas® Polypropylene Beakers are polypropylene with superior chemical resistance. Ribbed for easy stacking. Meets ISO/DIS 7056 Standards for Lab Plastic Accuracy. Autoclavable.

Glass Order Code	Plastic Order Code	Description
0410	0944	Beaker, 50 mL
0415	0896	Beaker, 100 mL
0414	2-2011	Beaker, 150 mL
0596	—	Beaker, 200 mL
0411	0609	Beaker, 250 mL
2-2024	2-2013	Beaker, 400 mL
0412	2-2014	Beaker, 600 mL
2-2027	—	Beaker, 1,000 mL

BOD Polyseed

Polybac Corporation Polyseed®

For producing acclimated seed for fast, economical BOD5 analyses with consistent results. Each capsule contains 100 mg for specialized, lyophilized bacterial cultures. Contents of capsule are added to 500 mL of APHA standard nutrient water at 20°C and stirred for 60 minutes. Resultant mixtureprovides enough acclimated seed for up to 250 BOD tests. EPA accepted.

Order Code	Description
3-0002	Polyseed®, Pk 50

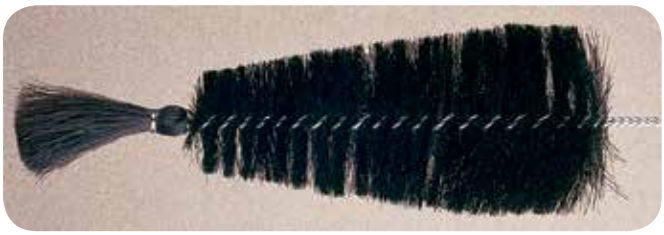
Flask/BOD Bottle Brush

Allows access to entire inside surface of flasks or BOD bottles. Black hog bristle brush 4.25 inches. long mounted on a flat steel shank attached to a pivoting shaft.

Order Code	Description
1929-R35	Brush, 16 inch, Pk 3

Imhoff Cone Brush

Conical shape with tufted bristle and sturdy twisted wire handle. Black bristles combine with stiff fibers, shaped to fit into cone tip. Bristle part 9 in. long, 4 in. top diameter, 1.5 inch bottom diameter, tip 3 inch long, length including handle 30 inch.



Order Code	Description
1930-D10	Brush, Imhoff cone

Burets

Twelve inch high, self-leveling, glass burets are graduated from 0–10 mL in 0.1 mL increments. Available with rubber squeeze valve, glass stopcock, or Teflon® stopcock. Buret-24 assembly includes empty 250 mL bottle of natural, low density polyethylene which attaches to 24 mm screwcap on buret stem. Buret-28 assembly has 250 mL bottle of amber polyethylene and 28 mm cap. Bottle serves as titrant reservoir; a gentle squeeze forces titrant into buret, where it automatically levels on 0 mL mark at top of scale.

Buret Type	Order Code With Poly Bottle	Order Code With Amber Bottle	Order Code Buret & Caps Only
Rubber Squeeze	0847-24	0847-28	0427
Glass Stopcock	0827-24	0827-28	0826
Teflon Stopcock	0996-24	0996-28	0997

Cleaners

Alconox® Biodegradable Cleaning Compound

Mild, odorless, non-toxic powdered wetting agent and detergent for cleaning glassware, porcelain, metal, plastic, or rubber. Suitable for use in ultrasonic cleaners. Usual dilution 1 tablespoon to 1 gallon water.

Order Code	Description
2902-G05	Alconox, 4 lb Box

Cleaners - Coliform

Cleaners (Continued)

Kimberly-Clark Kimwipe® Absorbent Light-Duty Wiper

Single-ply premium lab wiper for extra low-lint performance. Won't scratch delicate surfaces. LINT-GUARD® polyshield reduces lint and electrostatic discharge when dispensing. Gently absorbent for light liquid pickup.

Order Code	Description
2-2069	4.5 x 8.5 single-ply in dispensing box, Box 280

Coliform

Thomas® Coliform Water Sample Bag

Twist tie top seals with a 5 mm wide metal strip. Large textured label area. Meets EPA requirements for microbiological samples for potable water according to Standard Methods (Method 9060 A) or for NPDES compliance monitoring. Sterilized, with thiosulfate dechlorination tablet included. 100 mL fill line marked for easy reference.

Order Code	Description
1303-R90	Sample Bag, 100/bag

COD Heater

120V and 230V, 12-tube capacity. This COD heater block features digital microprocessor control, programmable time and temperature settings, and a dual LED display to monitor both temperature and timer. Perfect for COD, Total Phosphorus, and Total Nitrogen testing PLUS other tests requiring digestion. See page 14 for additional specifications.

Order Code	Description
5-0102	COD Heater Block, 120 V
5-0102-EX2	COD Heater Block, 230 V

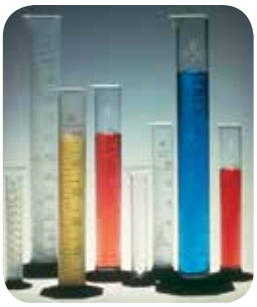
Thomas® Coliform Water Sampling Vial

Improved sample container for microbiological testing. Ideal when filtration or the Colilert® method is used. Improved latching mechanism, won't open or leak in transit. Pre-sterilized, with thiosulfate tablet included. 120 mL fill line.

Order Code	Description
9853-Q41	Vial with tablet, Bg 100

Cylinders

Glass cylinders have pouring spout and permanent fused white graduations. Plastic cylinders meet ASTM Class B, E1272 standards and have excellent heat and chemical resistance.



Plastic	Volume (Ml)	Graduation Intervals (Ml)	Glass Order Code
2-2076	10	0.2	0416
2-2077	25	0.5	0417
2-2078	50	1.0	0418
2-2079	100	1.0	0419
2-2080	250	2.0	—
2-2081	500	5.0	—
2-2082	1,000	10.0	—

Filter Paper

All papers listed are sold 100 to a package.

Order Code	Description	Diameter (Cm)	Speed
Alhstrom			
0463	No. 642-27, Qual.	11	Slow
0465	No. 642, Qual.	9	Medium
Whatman			
0947	No. 2, Qual.	2.5	Medium
0471	No. 2, Qual.	9	Medium
2-2098	No. 42, Ashless, Quan.	9	Slow
2-2100	No. 42, Ashless, Quan.	12.5	Slow
1157	Glass Fiber	2.4	—

Whatman® Quantitative Ashless Filter Papers

Suitable for precipitates that are ordinarily difficult to filter (2.5 mm particle retension). Acid Wash, Ash Content 0.007%. Highly retentive for very fine analytical precipitates. Recommended for use with vacuum.

Order Code	Description
2-2098	Filter Paper, 9 cm, Pk 100
4716-Q25	Filter Paper, 11 cm, Pk 100
2-2100	Filter Paper, 12.5 cm, Pk 100

Filter/Syringe Assembly

For on-site collection of filtrates or filtered material from natural or industrial waters. Consists of 60 mL plastic syringe, dual check-valve, Delrin® filter holder with Luer slip outlet and clear flexible PVC tubing, 3 ft. long x 0.625 inch i.d. Tubing attaches to check-valve outlet. Syringe is calibrated to 0 to 60 mL and 0 to 2 oz.

Order Code	Description
1050	Complete filter/syringe assembly
0943	Syringe, 60 mL
1175	Tubing, 36 in.
1174	Check-valve
0598	Filter Holder
	Code 0598 holder acccepts the following filters (furnished in packages of 100, unless otherwise specified):
0947	Paper, 2.5 cm
1157	Glass Fiber, 24 mm
Membrane, 25 mm	
1103	0.45 micron, pkg. 100

Flasks

Nalge® Erlenmeyer Flasks

Glass flasks have thick-walled body with tapered contour to minimize chipping. Approximate volumes are indicated. Plastic flasks are polycarbonate with polypropylene screw closures; use for preparation and storage of culture media and culturing techniques.

Plastic Order Code	Description	Glass Order Code
2-2116	Flask, 125 mL	0431
2-2117	Flask, 250 mL	0433

Flasks - Hydrometers

Flasks, Corning Volumetric

Pyrex® Brand Class A. Heavy beaded, heavy tubing neck with snap cap. White block letters for easy readability.

Order Code	Description
2-2127	Flask, Volumetric, 50 mL
2-2128	Flask, Volumetric, 100 mL
2-2129	Flask, Volumetric, 500 mL

Funnels, Plastic

Reinforced rim. Ridges outside and inside permit air passage and improve filtering efficiency. Withstand continuous use at temperatures up to 130°C.

Order Code	Description
2-2134	Funnel, 9 mL
2-2135	Funnel, 20 mL
0459	Funnel, 37 mL
2-2137	Funnel, 95 mL

Hydrometers

Specific Gravity 1 to 1.6

For liquids heavier than water. Approximate total length 305 mm, approximate length of graduate scale 135 mm, viewing range has scale approximately 150 mm long, and is made without conventional enlarged bulb at bottom. Tolerance ±1 scale division. Requires a cylinder 340x38 mm and approximately 250 mL of liquid.

Order Code	Description
2-2150	Hydrometer, 1.000-1.220: 0.002 interval
2-2151	Hydrometer, 1.200-1.420: 0.002 interval
2-2155	Hydrometer, 1.000-1.600: 0.005 interval

Corning Pyrex® Brand Hydrometer Cylinder

Heavy wall construction. Large, hexagonal base, sealed to the cylinder body, increases stability.

Order Code	Description
2-2149	Hydrometer Cylinder, 38 x 340 mm

Magnifier

MacroLens

MacroLens with 5X magnification covers the entire petri dish. 4 inch diameter.

Order Code	Description
5508	MacroLens
5508-10	MacroLens 10 Pack

Pipets: Bel-Art® Safety Bulb

Tapered silicone seal provides airtight fit in all pipet sizes. 2-2164 comes complete with an elastic cord for dedicating pipettor to a specific reagent bottle.

Order Code	Description
2-2164	Safety Bulb
0395	Safety Bulb

Pipets: Corning Transfer Pipets

Pyrex® Class A. Tapered at both ends. Calibrated to deliver rated volume at 20°C.

Order Code	Description
2-2170	Transfer Pipet, 1 mL
2-2174	Transfer Pipet, 5 mL
2-2175	Transfer Pipet, 10 mL

Stirring Bars

Octagon-shaped with rounded ends and molded pivot ring.

Magnetic Stirring Bar Retriever

For insertion or removal of magnetic stirring bars. Overall length 11.5 inches.

Order Code	Description
2-2185	Stirring Bar, .3125 x 1 inch
2-2186	Stirring Bar, .3125 x 1.625 inch
2-2187	Magnetic Pick Up Rod

Stirrers & Accessories - Thermometers

Stopcock Grease

Lubriseal® Stopcock Grease

For lubricating ground glass joints, glass, and metal stopcocks and valves, and for sealing desiccators, anaerobic culture jars, and similar utensils. Prevents the freezing of stopcocks, ground joints, etc. Low vapor pressure, and resists attack by acidic and alkaline solutions. Smooth textured, stable, free from vegetable or animal oil or silicone, and practically insoluble in water.

Order Code	Description
2-2158-H	Lubriseal, 75g tube

Thermometer, Armored

A precision, NON-MERCURY thermometer encased in a protective, plastic jacket. Window opening views engraved graduation on white tubing which increases readability. Full range of -5° to 45° in 0.5° increments.

Order Code	Full Range
1066	-5° to 45°C in 0.5° increments

Thermometer, Thomas® Switchable, °C/°F

8 in. thermometer with a wide range and digital display. Fits into cuvettes, test tubes, flasks, and beakers. Stainless steel probe is resistant to acids, bases, solvents, and most laboratory chemicals. Dual range of -58° to 302°F or -50° to 150°C. Digital resolution of 0.1° from -20° to 200°. Accuracy is ±1°C between -20° to 100°C. Readings updated every second. Operates continuously for over a year on a single replaceable silver-oxide battery (included). Supplied with protective case that can be used as a holder.

Order Code	Description
9329-H01	Switchable Thermometer with Digital Display

Aquaculture Testing Products

Code 1612

Test kits and instrumentation for critical water quality control of aquarium systems. Designed for the hobbyist, retailer, and ornamental fish culturist. Test kits, instrumentation, and combination outfits designed for fish farms, hatcheries, and research institutions. Equipment designed for monitoring water quality conditions on-site and at benchtop locations.

Science Education Products

Code 1590

Practical, "hands-on" test equipment for air, soil and water chemistry students in elementary, secondary, vocational, outdoor and college science programs.

Pool & Spa Water Test Equipment

Code 1634

A complete line of test kits, combination outfits and labs for pool professionals, public pool or spa operators, and private pool or spa owners.

Product Price List

Code 1645

This "component price list" gives price and ordering information on all standard LaMotte reagents, labware, apparatus and accessories. Reagents are listed in kit-size and bulk containers.

Soil Testing Products

Code 1652

Field and laboratory test equipment for measurement of soil nutrients and soil pH. For agricultural soils, greenhouses, gardens, dairy sanitation, aquaculture and hydroculture.

Water Conditioning Testing Products

Code 1650

Softener sales demonstration outfits and other specialized test equipment for the point-of-use water treatment industry.

Food & Beverage Safety Testing Products

Code 1658

A comprehensive collection of test kits, test strips, and instruments for use in Industrial and Food/Beverage applications.

A Study of Water Quality

Dr. Charles E. Renn; 46 pages

Examines the "life cycle" of water from its occurrence in nature to its treatment for domestic and industrial use, with emphasis on such water quality problems as scaling, corrosiveness, taste, and turbidity.

Order Code 1532

A Laboratory Manual for Marine Science Studies

Staff, LaMotte Company; 32 pages

Test procedures and background information on sampling and analysis in salt water environments - oceans, bays, marine estuaries, and salt marshes.

Order Code 1587

Chemistry & Control of Modern Chlorination

Dr. A.T. Palin; 64 pages

The process of chlorination and principal methods of chlorine testing. Written by a leading international authority on chlorine measurement.

Order Code 1597

Investigating Water Problems

Dr. Charles E. Renn; 72 pages

Discusses 25 chemical factors of water quality analytical procedures for their measurement and interpretation of test results.

Order Code 1589

Limnology: An Introduction to the Fresh Water Environment

William A. Amos; 40 pages

Discusses biological, chemical, and physical processes in ponds, lakes, swamps, streams, and rivers - stream dynamics, plant zonation, the succession of ponds, the energy cycle of ponds, etc.

Order Code 1593

Marine Aquarium Handbook

Staff, LaMotte Co.; 20 pages

Test procedures and background information on chemical testing for successful management of aquarium water.

Order Code 1585

Monitor's Handbook

Staff, LaMotte Co.; 71 pages

A complete guide covering the importance of water quality of all types of natural waters. Gives guidance for watershed surveys, site location, sample collection, and choosing appropriate methods and equipment. Describes physical, chemical, and biological factors of water quality, and the analytical procedures for their measurement. Provides the basic program planning, data analysis, and reporting with conversion factors, glossary, and resource list. For individuals or groups starting a water quality monitoring program.

Order Code 1507

Our Environment Battles Water Pollution

Dr. Charles E. Renn; 32 pages

Traces a theoretical river from its origin as a mountain brook to its discharge into a marine estuary, examining the chemical and biological changes that occur as the stream reacts to impurities from natural and industrial sources.

Order Code 1592

Pool Mgr. Handbook

Staff, LaMotte Company; 60 pages

A 60 page text for entry level lifeguards or aquatic supervisors. Discussions on water balance, sanitation, analysis, and problem solving. Water treatment charts are provided.

Order Code 1505

A Study of Soil Science

Dr. Henry D. Foth; 44 pages

An introduction to soil formation, soil pH, mineral elements and plant nutrition, the life cycle of growing plants, and soil fertility management.

Order Code 1530

The LaMotte Soil Handbook

Staff, LaMotte Company; 60 pages

This "growers manual" discusses major and minor nutrients, trace elements, soil pH, organic matter, soil texture, etc. Includes lime and fertilizer recommendations for a variety of crops and plants.

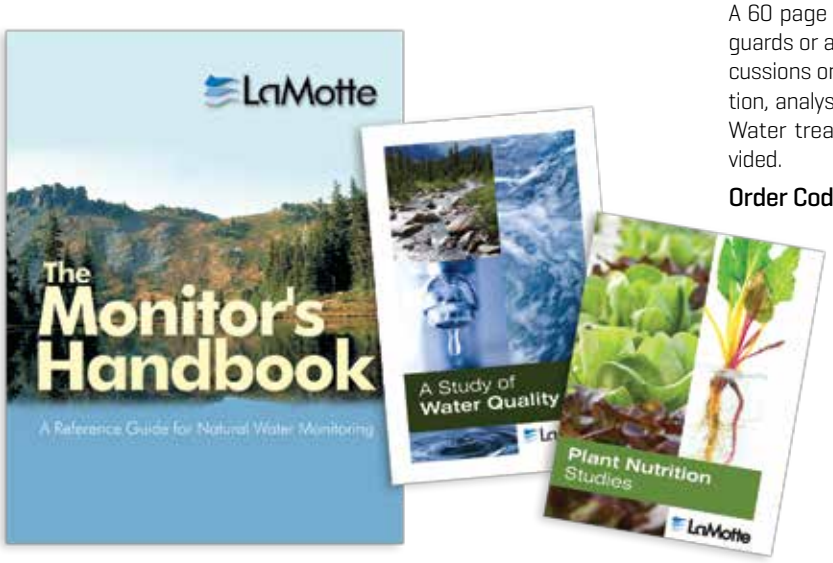
Order Code 1504

Plant Nutrition Studies

Dr. Robert Stegner; 76 pages

Discusses the study and practice of hydroponics - plant culture in soilless solutions - and includes a series of laboratory investigations.

Order Code 1596



LaMotte has available a large variety of standards to be used in many applications.

Primary Standards	Concentration	Order Code	Quantity (mL)	Shelf Life
Ammonia Nitrogen	100 ppm	3871-H	60	2 yrs.
Chlorine	250 ppm	6973-H	60	6 mo.
Chlorine	250 ppm	6973-L	475	6 mo.
Chlorine Equivalent	1000 ppm	3858-H	60	6 mo.
COD Equivalent	500 ppm	7589-L	475	2 yrs.
Color	500 cu	6058-H	60	3 yrs.
Color	500 cu	6058-L	500	3 yrs.
Conductivity/ TDS	84 µS/59 ppm	6312-L	500	1.5 yrs.
Conductivity/ TDS	718 µS/ 503 ppm	6417-J	120	1.5 yrs.
Conductivity/ TDS	718 µS/ 503 ppm	6417-L	500	1.5 yrs.
Conductivity/ TDS	718 µS/ 503 ppm	6417-N	3800	1.5 yrs.
Conductivity/ TDS	1413 µS/ 989 ppm	6354-J	120	1.5 yrs.
Conductivity/ TDS	1413 µS/ 989 ppm	6354-L	500	1.5 yrs.
Conductivity/ TDS	1413 µS/ 989 ppm	6354-N	3800	1.5 yrs.
Conductivity/ TDS	6668 µS/ 4668 ppm	6418-J	100	1.5 yrs.
Conductivity/ TDS	6668 µS/ 4668 ppm	6418-L	500	1.5 yrs.
Conductivity/ TDS	12880 µS/ 9016 ppm	6317-G	30	1.5 yrs.
Conductivity/ TDS	12880 µS/ 9016 ppm	6317-J	120	1.5 yrs.
Conductivity/ TDS	12880 µS/ 9016 ppm	6317-L	500	1.5 yrs.
Conductivity/ TDS	58640 µS/ 41048 ppm	6419-L	500	1.5 yrs.
Copper	100 ppm	6181-L	475	2 yrs.
Fluoride	1000 ppm	4154-H	60	1 yr.
Fluoride	1000 ppm	4154-L	500	1 yr.
Fluoride	1 ppm	2798-M	1000	2 yrs.
Hard Water	120 ppm	5617-L	500	3 yrs.
Ferric Iron	200 ppm	3860-H	60	1.5 yrs.
Magnesium	1000 ppm	6190-H	60	1 yr.
Nickel	1000 ppm	6196-H	60	2 yrs.
Nitrate Nitrogen	1000 ppm	5392-H	60	2 yrs.
pH	2.0	2856-L	500	1.5 yrs.

Primary Standards	Concentration	Order Code	Quantity (mL)	Shelf Life
pH Buffer Tablets	4.0	3983A-H	50 Tabs	3 yrs.
pH Buffer Tablets	4.0	3983A-J	100 Tabs	3 yrs.
pH	4.01	2866-J	120	1.5 yrs.
pH	4.01	2866-L	500	1.5 yrs.
pH	4.01	2866-N	3800	1.5 yrs.
pH Color Coded Red	4.01	3771-L	500	1.5 yrs.
pH	6.0	2876-L	500	1.5 yrs.
pH	6.86	2808-L	500	1.5 yrs.
pH Buffer Tablets	7.0	3984A-H	50 Tabs	3 yrs.
pH Buffer Tablets	7.0	3984A-J	100 Tabs	3 yrs.
pH	7.00	2881-H	60	1.5 yrs.
pH	7.00	2881-J	120	1.5 yrs.
pH	7.00	2881-L	500	1.5 yrs.
pH	7.00	2881-N	3800	1.5 yrs.
pH Color Coded Yellow	7.00	3772-L	500	1.5 yrs.
pH	8.0	2886-L	500	1.5 yrs.
pH	9.0	2891-L	500	1.5 yrs.
pH	9.18	2809-L	500	1.5 yrs.
pH Buffer Tablets	10.0	3985A-H	50 Tabs	3 yrs.
pH Buffer Tablets	10.0	3985A-J	100 Tabs	3 yrs.
pH	10.0	2896-J	120	1.5 yrs.
pH	10.0	2896-L	500	1.5 yrs.
pH Color Coded Blue	10.0	3773-L	500	1.5 yrs.
pH	11.0	2897-L	500	1.5 yrs.
pH	12.0	2898-L	500	1.5 yrs.
Phosphate PO_4	1000 ppm	6184-L	475	1 yr.
Phosphate PO_4	3080 ppm	5393-H	60	2 yrs.
Phosphate PO_4	3080 ppm	5393-L	475	2 yrs.
Phosphorus (Total)	1000 ppm	5393-H	60	2 yrs.
Phosphorus (Total)	1000 ppm	5393-L	475	2 yrs.
Potassium	1000 ppm	6187-L	475	2 yrs.
Sulfate	2000 ppm	7120-H	60	2 yrs.

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Primary Standards	Concentration	Order Code	Quantity (mL)	Shelf Life
Turbidity 2020we	0 NTU	1480	60	1 yr.
Turbidity 2020we	1 NTU	1450	60	1 yr.
Turbidity 2020we	10 NTU	1451	60	1 yr.
Turbidity 2020we	100 NTU	1452	60	1 yr.
Turbidity 2020wi	0 NTU	1480	60	1 yr.
Turbidity 2020wi	1 NTU	1453	60	1 yr.
Turbidity 2020wi	10 NTU	1454	60	1 yr.
Turbidity 2020wi	100 NTU	1455	60	1 yr.
Turbidity 2020e	0 NTU	1480	60	1 yr.
Turbidity 2020e	1 NTU	1484	60	1 yr.
Turbidity 2020e	10 NTU	1485	60	1 yr.
Turbidity 2020e	100 NTU	1486	60	1 yr.
Turbidity 2020i	0 NTU	1480	60	1 yr.
Turbidity 2020i	1 NTU	1481	60	1 yr.
Turbidity 2020i	10 NTU	1482	60	1 yr.
Turbidity 2020i	100 NTU	1483	60	1 yr.
Turbidity 2020	1 NTU	1476	60	1 yr.
Turbidity 2020	10 NTU	1477	60	1 yr.
Turbidity 2020	100 NTU	1478	60	1 yr.
Turbidity Formazin	4000 NTU	6195-H	60	1 yr.
Zinc	100 ppm	5394-L	475	2 yrs.

Secondary Standards	Concentration	Order Code		
Chlorine DPD	0, 0.2, 1.0, 2.5 ppm	4140-02		
Smartcheck	Various Absorbance Units	4141-01		

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Z

Order Form

How To Order

By Mail: LaMotte Company
PO Box 329
Chestertown, Maryland 21620 USA

By Phone: 800 344 3100
410 778 3100

By Fax: 410 778 6394

Website: www.lamotte.com

Bill To

Name _____
Title _____
Company _____
Department _____
City _____
State/Zip _____
Phone _____
Account # _____

Ship To

Name _____
Title _____
Company _____
Department _____
City _____
State/Zip _____
Phone _____
Ship Via. _____

Special Instructions: _____

Payment Method

Payment Terms are net 30 days to accounts with established credit. New accounts should provide credit references or enclose payment with order. MasterCard, VISA, and American Express are also accepted.

- ❑ Check
- ❑ Purchase Order
- ❑ MasterCard
- ❑ VISA
- ❑ American Express

Credit Card Account #	
Expiration Date	
Purchase Order #	
Name as it appears on card	

Order

Please include the product code number for each item ordered to insure that your order is speedily and correctly processed. Prices are f.o.b., Chestertown, Maryland. Prices are subject to change without prior notice. A $7.50 handling fee and a $7.50 shipping fee are applied to all orders totaling less than $35.00. On orders to which a handling fee is not applicable, freight charges will be added at cost to invoice total.

Quantity	Code	Model/Description	Unit Price	Extension
			Net Total	
			$15.00 Shipping and Handling Fee (If Net Total is Less Than $35.00)	
			Sales Tax, If Applicable (Maryland Only)	
			Invoice Total	

PHONE	1-800-344-3100 (001) 1-410-778-3100
FAX	(001) 1-410-778-6394
INTERNET	www.lamotte.com lamotte.com/contact_us.html
MAIL	PO Box 329 802 Washington Avenue Chestertown, Maryland 21620 USA
EASY PAYMENT	Order with a purchase order or use VISA, American Express, MasterCard or enclose payment with purchase order if you don't have an account. To open a new account, please provide credit references.

COURTEOUS SERVICE and an interest in every customer's satisfaction have given LaMotte Company a reputation of distinction in the chemical testing field. Please give us the opportunity to meet your chemical testing requirements today.