

GYLON® Style 3545

MATERIAL PROPERTIES*:

Color:	White
Composition:	Microcellular PTFE
Fluid Services (see chemical resistance guide):	Strong caustics, strong acids, chlorine, hydrocarbons, cryogenics, glass-lined equipment and low bolt load applications ²
Temperature¹, °F (°C)	
Minimum:	-450 (-268)
Maximum:	+500 (+260)
Ideal Operating Limit:	+400 (+204)
Pressure¹, psig (bar):	
Minimum:	Full Vacuum
Maximum:	1200 (83)
Ideal Operating Limit:	750 (52)
P x T (max.)¹, psig x °F (bar x °C):	
1/32 and 1/16":	350,000 (12,000)
1/8":	250,000 (8,600)
Flammability:	Will Not Support Flame
Bacterial Growth:	Will Not Support
Meets Specifications:	ABS (American Bureau of Shipping), FDA (Food and Drug Administration) 21 CFR 177.1550

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility, average, %:	60-70		
ASTM F36	Recovery, %:	15		
ASTM F38	Creep Relaxation, %:	15		
ASTM D149	Dielectric Properties, range, volts/mil.			
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>	
	3 hours at 250°F	248	244	
	96 hours at 100% Relative Humidity:	222	264	
ASTM F586	Design Factors	<u>1/16" & Under</u>	<u>1/8"</u>	
	"m" factor:	2.6	2.0	
	"y" factor, psi (N/mm ²):	1500 (10.3)	2200 (15.2)	
ROTT	Gasket Constants:			
	1/16"	Gb=162.1	a=0.379	Gs=1.35x10 ⁻⁹
	1/8":	Gb=92.48	a=0.468	Gs=2.50x10 ⁻³
	3/16":	Gb=628	a=0.249	Gs=7.93x10 ⁻⁵

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	DIN 3535 – Nitrogen
Gasket Load , psi (N/mm ²):	1000 (7)	4640 (32)
Internal Pressure , psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.15 ml/hr.	<0.015 cc/min

8/15/2023

Notes:

* This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results in accordance with ASTM F-104; properties

¹ Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PxT, consult Garlock Applications Engineering. Minimum temperature rating is conservative.

² For flat face flanges, a minimum compressive stress of 1500psi (103N/mm²) is recommended on the contacted gasket area for 150psig (10.4bar) liquid service.

Consult with the flange manufacturer to confirm that adequate compressive stress is available.