



Garlock GYLON® 3545

MATERIAL PROPERTIES*

Color:	White
Composition:	Microcellular PTFE
Fluid Services¹:	Strong caustics, strong acids, chlorine, hydrocarbons, cryogenics, plastic piping, glass-lined equipment and low bolt load applications ³
Temperature², °F (°C)	
Minimum:	-450 (-268)
Continuous Max:	+500 (+260)
Pressure², Maximum, psig (bar):	1200 (83)
P x T (max.)², psig x °F (bar x °C)	
1/32 and 1/16":	350,000 (12,000)
1/8":	250,000 (8,600)
Flammability:	Will Not Burn
Bacterial Growth:	Will Not Support
Meets Specification:	FDA (Food and Drug Administration)

PHYSICAL PROPERTIES*

ASTM F36	Compressibility, %:	60-70		
ASTM F36	Recovery, %:	15		
ASTM F38	Creep Relaxation, %:	15		
ASTM F152	Tensile, Across Grain, psi (N/mm²):	-		
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"</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
ASTM F104	Line Call Out:	F419000A9B3 ⁽⁴⁾		

SEALING CHARACTERISTICS*

	ASTM F37B Fuel A	DIN 3535- 4 Gas Permeability
Gasket Load, psi (N/mm2):	1000 (7)	4640 (32)
Internal Pressure, psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.15 ml/hr.	<0.015 cc/min

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 based on 1/32" (0.8mm) sheet thickness unless otherwise mentioned.

* Values do not constitute specification Limits

¹ See Garlock chemical resistance guide.

² 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.

³ 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.

⁴ Third numeral 9: F36 Compressibility = 60-70%. A9: Leakage in Fuel A (Isooctane), Gasket Load = 1,000psi (7.0N/mm²), Pressure = 9.8psig (0.7bar): Typical = 0.15ml/hr, Max = 1.0ml/hr.