

Garlock GYLON® 3594

MATERIAL PROPERTIES*

Color:	Green
Composition:	PTFE with inorganic filler
Fluid Services¹:	Moderate concentrations of acids, some caustics, hydrocarbons, solvents, hydrogen peroxide, refrigerants and cryogenics
Temperature², °F (°C)	
Minimum:	-450 (-268)
Continuous Max:	+500 (+260)
Pressure², Maximum, psig (bar):	800 (55)
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, %:	10-20
ASTM F36	Recovery, %:	45
ASTM F38	Creep Relaxation, %:	30
ASTM F152	Tensile, Across Grain, psi (N/mm²):	2000 (13.8)
ASTM D792	Specific Gravity:	2.10
ASTM D149	Dielectric Properties, range, volts/mil.	
	Sample conditioning	<u>1/16"</u> <u>1/8"</u>
	None	357 -
	96 hours at 100% Relative Humidity	- -
ASTM F586	Design Factors	<u>1/16"</u> <u>1/8"</u>
	"m" factor:	3.0 3.0
	"y" factor, psi (N/mm ²):	1650 (11.4) 2500 (17.2)
ROTT	Gasket Constants, 1/16":	Gb=151 a=0.41 Gs=1.64x10 ⁻⁵
	1/8":	Gb=66 a=0.523 Gs=4.98x10 ⁻⁶
ASTM F104	Line Call Out:	F453111A9B5E11M6 ⁽³⁾

SEALING CHARACTERISTICS*

	ASTM F37B Fuel A	ASTM F37B Nitrogen
Gasket Load, psi (N/mm²):	1000 (7)	3000 (20)
Internal Pressure, psig (bar):	9.8 (0.7)	30 (2)
Leakage	0.5 ml/hr.	0.1 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 P x T, consult Garlock Applications Engineering.

³ A9: Leakage in Fuel A (Isooctane), Gasket Load = 1,000psi (7.0N/mm²), Pressure = 9.8psig (0.7bar): Typical = 0.50ml/hr. A9: Leakage in Nitrogen, Gasket Load = 3,000psi (20.7N/mm²), Pressure = 30psig (2bar): Typical = 0.1ml/hr.