

Garlock BLUE GYLON® 3504

MATERIAL PROPERTIES*:

Color:	Blue
Composition:	PTFE with Aluminosilicate microspheres
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:	ABS (American Bureau of Shipping), FDA (Food and Drug Administration) and USP (US Pharmacopeia)

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility, %:	25-45		
ASTM F36	Recovery, %:	30		
ASTM F38	Creep Relaxation, %:	40.0		
ASTM D1708	Tensile, Across Grain, psi (N/mm²):	2000 (13.8)		
ASTM D792	Specific Gravity:	1.70		
ASTM D1708	Modulus @ 100% Elongation, psi (N/mm²):	1500 (10.3)		
ASTM F433	Thermal Conductivity (K) W/m²K (Btu. in./hr. ft. 2. °F)	0.14-0.24 (1.00-1.65)		
ASTM D149	Dielectric Properties, range, volts/mil.			
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>	
	3 hours at 250°F:	318	-	
	96 hours at 100% Relative Humidity:	245	-	
ASTM F586	Design Factors	<u>1/16" & Under</u>		<u>1/8"</u>
	"m" factor:	3.0		2.5
	"y" factor, psi (N/mm ²)	1650 (11.4)		3000 (20.7)
ROTT	Gasket Constants, 1/16":	Gb=183	a=0.357	Gs=4.01x10 ⁻³
	1/8":	Gb=1008	a=0.221	Gs=2.23

SEALING CHARACTERISTICS*

	ASTM F37B Fuel A	DIN 3535-4 Gas Permeability
Gasket Load , psi (N/mm ²):	1000 (7)	4640 (32)
Internal Pressure , psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.12 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 P_{xT}, consult Garlock Applications Engineering.