

MATERIAL PROPERTIES*:

Color:	White exterior and blue interior
Composition:	PTFE with Aluminosilicate microspheres
Fluid Services (see chemical resistance guide):	Moderate concentrations of acids, some caustics, hydrocarbons, solvents, hydrogen peroxide, refrigerants and cryogenics
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:	FDA (Food and Drug Administration) 21 CFR 177.1550

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility, average, %:	30-50 ⁽³⁾	
ASTM F36	Recovery, %:	35 ⁽³⁾	
ASTM F38	Creep Relaxation, %:	35 ⁽³⁾	
ASTM D1708	Tensile, Across Grain, psi (N/mm²):	1800 (12.4) ³	
ASTM D792	Specific Gravity:	1.65	
ASTM D1708	Modulus @ 100% Elongation, psi (N/mm²):	1300 (8.9) ³	
ASTM F433	Thermal Conductivity (K), W/m²K (Btu·in./hr·ft.²·°F):	N/A	
ASTM D149	Dielectric Properties, range, volts/mil.		
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>
	3 hours at 250°F	301	-
	96 hours at 100% Relative Humidity:	221	-
ASTM F586	Design Factors	<u>1/16" & Under</u>	<u>1/8"</u>
	"m" factor:	2.8	3.7
	"y" factor, psi (N/mm ²):	1400 (9.6)	2300 (15.9)
ROTT	Gasket Constants:		
	1/16"	N/A	
	1/8"	N/A	

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	DIN 3535 – Nitrogen
Gasket Load, psi (N/mm²):	1000 (7)	4640 (32)
Internal Pressure, psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.33⁽³⁾ ml/hr.	<0.015⁽³⁾ 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

¹ 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. Minimum temperature rating is conservative.

³ Test results based on 1/16" thick material

8/15/2023