

### MATERIAL PROPERTIES\*:

<b>Color:</b>	Blue
<b>Composition:</b>	PTFE with Aluminosilicate microspheres
<b>Fluid Services</b> (see chemical resistance guide):	Many acids, some caustics, hydrocarbons, solvents, hydrogen peroxide, refrigerants and cryogenics
<b>Temperature<sup>1</sup>, °F (°C)</b>	
Minimum:	-450 (-268)
Maximum:	+500 (+260)
Ideal Operating Limit:	+400 (+204)
<b>Pressure<sup>1</sup>, psig (bar):</b>	
Minimum:	Full Vacuum
Maximum:	800 (55)
Ideal Operating Limit:	750 (52)
<b>P x T (max.)<sup>1</sup>, psig x °F (bar x °C):</b>	
1/32 and 1/16":	350,000 (12,000)
1/8"	250,000 (8,600)
<b>Flammability:</b>	Will Not Support Flame
<b>Bacterial Growth:</b>	Will Not Support
<b>Meets Specifications:</b>	ABS (American Bureau of Shipping), FDA (Food and Drug Administration) 21 CFR 177.1550 and USP (US Pharmacopeia)

### TYPICAL PHYSICAL PROPERTIES\*:

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

### SEALING CHARACTERISTICS\*

	ASTM F37B – Fuel A	DIN 3535 – Nitrogen
<b>Gasket Load</b> , psi (N/mm <sup>2</sup> ):	1000 (7)	4640 (32)
<b>Internal Pressure</b> , psig (bar):	9.8 (0.7)	580 (40)
<b>Leakage</b>	<b>0.12 ml/hr.</b>	<b>&lt;0.015 cc/min</b>

#### 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

<sup>1</sup> 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.

8/15/2023