

## Material Properties\*

<b>Color:</b>	Blue
<b>Composition:</b>	PTFE with Aluminosilicate microspheres
<b>Fluid Services</b> (See chemical resistance guide):	Oxygen service, 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>PxT (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>	NSF 61 (National Sanitation Foundation) approved for potable water, FDA Compliant 21 CFR 177.1550

## Typical Physical Properties\*

<b>ASTM F36</b>	<b>Compressibility, average, %:</b>	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, Across Grain, psi (N/mm<sup>2</sup>):</b>	2000 (13.8)	
<b>ASTM D792</b>	<b>Specific Gravity:</b>	1.70	
<b>ASTM D1708</b>	<b>Modulus @ 100% Elongation, psi (N/mm<sup>2</sup>):</b>	1500 (10.3)	
<b>ASTM F433</b>	<b>Thermal Conductivity (K), W/m<sup>2</sup>K (Btu. · in./hr. · ft.<sup>2</sup> · °F):</b>	0.14-0.24 (1.00-1.65)	
<b>ASTM D149</b>	<b>Dielectric Properties, range, volts/mil.</b>		
	Sample conditioning	1/16"	1/8"
	3 hours at 250°F	318	-
	96 hours at 100% Relative Humidity:	245	-
	Oil Bath (submersed to prevent arching)	310	281
<b>ASTM F586</b>	<b>Design Factors</b>	1/16" & Under	1/8"
	"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 = 4.01 x 10 <sup>-3</sup>
	1/8"	Gb = 1008	a = 0.221      Gs = 2.23

## Sealing Characteristics\*

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

\* This is a general guide and should not be 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 D&D Engineered Products. Minimum temperature rating is conservative.