

## Garlock 800

### MATERIAL PROPERTIES\*:

<b>Color:</b>	White & Green
<b>Composition:</b>	Glass fiber with a nitrile binder
<b>Fluid Services</b> (see chemical resistance guide):	Water, aliphatic hydrocarbons, low pressure saturated steam <sup>2</sup> , oils and gasoline
<b>Temperature<sup>1</sup>, °F (°C)</b>	
Minimum:	-100 (-75)
Continuous Max:	+550 (+290)
Maximum:	+800 (+425)
<b>Pressure<sup>1</sup>, Maximum, psig (bar):</b>	1200 (83)
<b>P x T (max.)<sup>1</sup>, psig x °F (bar x °C):</b>	
1/32 and 1/16":	325,000 (11,500)
1/8"	200,000 (6,800)

### TYPICAL PHYSICAL PROPERTIES\*:

<b>ASTM F36</b>	<b>Compressibility</b> , range, %:	8
<b>ASTM F36</b>	<b>Recovery</b> , %:	40
<b>ASTM F38</b>	<b>Creep Relaxation</b> , %:	30
<b>ASTM F152</b>	<b>Tensile, Across Grain, psi (N/mm<sup>2</sup>):</b>	1500 (10.3)
<b>ASTM F1315</b>	<b>Density, lbs./ft.<sup>3</sup> (grams/cm<sup>3</sup>):</b>	105 (1.7)

### SEALING CHARACTERISTICS\*

	<b>ASTM F37B Fuel A</b>	<b>ASTM F37B Nitrogen</b>	<b>DIN 3535 Nitrogen</b>
<b>Gasket Load</b> , psi (N/mm <sup>2</sup> ):	500 (3.5)	3000 (20.7)	4640 (32)
<b>Internal Pressure</b> , psig (bar):	9.8 (0.7)	30 (2)	580 (40)
<b>Leakage</b>	<b>0.6 ml/hr.</b>	<b>1.0 ml/hr.</b>	<b>0.1 cc/min</b>

### IMMERSION PROPERTIES\*- ASTM F146 Fluid Resistance after Five Hours

	<b>ASTM #901 Oil</b> 300°F (150°C)	<b>ASTM IRM #903</b> 300°F (150°C)	<b>ASTM Fuel A</b> 70-85°F (20-30°C)	<b>ASTM Fuel B</b> 70-85°F (20-30°C)
<b>Thickness Increase, (%)</b>	6	10	5	10
<b>Weight Increase, (%)</b>	10		6	12
<b>Tensile Loss (%)</b>		45		

#### 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 P x T, consult Garlock Applications Engineering. Minimum temperature rating is conservative.

<sup>2</sup> Minimum recommended assembly stress = 4,800psi. Preferred assembly stress = 6,000-10,000psi. Gasket thickness of 1/16" strongly preferred. Retorque the bolts/studs prior to pressurizing the assembly. For saturated steam above 50psig or superheated steam, consult Garlock Engineering.

REV: 10/11/16