MATERIAL PROPERTIES

Color: Gray
Composition: Inorganic fibers with a nitrile binder

Fluid Services:
Saturated steam, most refrigerants, water, oils, gasoline and aliphatic hydrocarbons

Temperature, °F (°C):
Minimum: -100 (-73)
Continuous Max: +550 (+288)
Maximum: +800 (+427)

Pressure, Maximum, psig (bar): 1200 (83)

P x T (max.), psig x °F (bar x °C):
1/32 and 1/16": 400,000 (14,000)
1/8": 275,000 (9,600)

Meets Specification:
ABS (American Bureau of Shipping) and Fire Safe

PHYSICAL PROPERTIES

ASTM F36 Compressibility, range, %: 7-17
ASTM F36 Recovery, %: 50
ASTM F38 Creep Relaxation, %: 15
ASTM F152 Tensile, Across Grain, psi (N/mm²): 1500 (10)
ASTM F1315 Density, lbs./ft.³ (grams/cm³): 110 (1.76)
ASTM F433 Thermal Conductivity (K), W/m°K (Btu·in./hr·ft²·°F): 0.43-0.53 (3.00-3.65)
ASTM D149 Dielectric Properties, range, volts/mil.
Sample conditioning 1/16" 1/8"
3 hours at 250°F: 284 245
96 hours at 100% Relative Humidity: - -
ASTM F586 Design Factors
"m" factor: 6.6 6.6
"y" factor, psi (N/mm²): 2600 (17.9) 3300 (22.8)

ROTT Gasket Constants, 1/16":
Gb=1.247 a=0.249 Gs=11.0

ASTM F104 Line Call Out: F712103A9B4E23K7L501M4

SEALING CHARACTERISTICS

<table>
<thead>
<tr>
<th>Gasket Load, psi (N/mm²):</th>
<th>ASTM F37B Fuel A</th>
<th>ASTM F37B Nitrogen</th>
<th>DIN 3535-4 Gas Permeability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Pressure, psig (bar):</td>
<td>9.8 (0.7)</td>
<td>30 (2)</td>
<td>580 (40)</td>
</tr>
<tr>
<td>Leakeage</td>
<td>0.2 ml/hr.</td>
<td>1.0 ml/hr.</td>
<td>0.05 cc/min</td>
</tr>
</tbody>
</table>

IMMERSION PROPERTIES - ASTM F146 Fluid Resistance after Five Hours

<table>
<thead>
<tr>
<th>Thickness Increase, (%)</th>
<th>ASTM #1 Oil 300°F (150°C)</th>
<th>ASTM IRM #903 300°F (150°C)</th>
<th>ASTM Fuel A 70-85°F (20-30°C)</th>
<th>ASTM Fuel B 70-85°F (20-30°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight Increase, (%)</td>
<td>0-10</td>
<td>0-15</td>
<td>0-10</td>
<td>0-15</td>
</tr>
<tr>
<td>Tensile Loss, (%)</td>
<td>&lt;15</td>
<td>&lt;15</td>
<td>&lt;10 %</td>
<td>&lt;15</td>
</tr>
<tr>
<td>Weight Increase, (%)</td>
<td>-</td>
<td>&lt;40</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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.
1 Values do not constitute specification Limits
2 See Garlock chemical resistance guide.
3 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.
4 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 150psig or superheated steam, consult Garlock Engineering.