MATERIAL PROPERTIES

Color: Blue
Composition: Aramide fibers with a nitrile binder
Fluid Services:
- Water, aliphatic hydrocarbons, oils and gasoline

Temperature:
- Minimum: -100 (-73)
- Continuous Max: +400 (+205)
- Maximum: +700 (+371)

Pressure:
- Maximum, psig (bar): 1000 (70)

P x T (max.), psig x °F (bar x °C):
- 1/32 and 1/16": 350,000 (12,000)
- 1/8": 250,000 (8,600)

Meets Specification: ABS (American Bureau of Shipping) and BS 7531 Grade Y

TYPICAL PHYSICAL PROPERTIES

**ASTM F36** Compressibility, range, %: 7-17
**ASTM F36** Recovery, %: 50
**ASTM F38** Creep Relaxation, %: 21
**ASTM F152** Tensile, Across Grain, psi (N/mm²): 2250 (15)
**ASTM F1315** Density, lbs./ft.³ (grams/cm³): 100 (1.60)
**ASTM F433** Thermal Conductivity (K), W/m·°K (Btu·in./hr·ft²·°F): 0.29-0.38 (2.00-2.65)
**ASTM D149** Dielectric Properties, range, volts/mil:
- Internal Pressure, psig (bar):
  - 3 hours at 250°F: 396(3)-832 257(3)-363
  - 96 hours at 100% Relative Humidity: 271 142
- "m" factor: 4.2 5.2
- "y" factor, psi (N/mm²): 3050 (21.0) 4400 (30.3)
**ASTM F104** Line Call Out: F712102A9B4E22K5L101M5

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>Leakage</td>
<td>0.2 mi/hr.</td>
<td>0.6 mi/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>&lt;8</td>
<td>&lt;20</td>
<td>&lt;8</td>
<td>&lt;15</td>
</tr>
<tr>
<td>Tensile Loss, (%)</td>
<td>-</td>
<td>&lt;35</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.

* Values do not constitute specification Limits
1 See Garlock chemical resistance guide.
2 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.
3 Indicates current arced around and not through gasket. Dielectric higher than indicated.
4 A9: Leakage in Fuel A (Isocetane), Gasket Load = 500psi (3.5N/mm²), Pressure = 9.8psig (0.7bar); Typical = 0.2mi/hr, Max = 1.0mi/hr. A9: Leakage in Nitrogen, Gasket Load = 3,000psi (20.7N/mm²), Pressure = 30psig (2bar); Typical = 0.6mi/hr, Max = 1.5mi/hr.