THERMa-PUR™
Style 4122

THERMa-PUR™ is a proprietary new gasketing material designed for use in high temperature sealing applications. It is produced using an environmentally friendly solvent-free process and combines a unique formulation with a patent-pending fiber core. THERMa-PUR™ is yet another innovative Garlock Sealing Technologies sealing solution that provides more than just temperature resistance.

VALUE & BENEFITS

» Extreme Temperature  Able to withstand high temperature, whether continuous or in thermal cycling conditions
» Oxidation Resistance  Contains proprietary materials that provide improved weight loss characteristics over other high temperature solutions. (see graph)
» Hydrophobic & Electrically Insulating Resists water and provides electrical isolation thus reducing the possibility of corrosion between flanges made of dissimilar metals
» Easy Release from Flanges  Does not stick to flanges making removal of gaskets easy and fast
» Safer Handling  Patent-pending fiber core makes gaskets safer to handle when compared to traditional high temperature gaskets with steel cores

IDEAL FOR

» Marine and Land-based Exhaust Systems
» Biomass Gasification Process
» Oil and Gas Production
» Mineral and Fertilizer Processing
» Incineration Process
» Co-generation Systems
» Turbochargers Equipment
» Process Drying Equipment
**TYPICAL PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>4122-FC</th>
<th>4122-CMG</th>
<th>4122-KAMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure  psig (bar)</td>
<td>500 (34.5)</td>
<td>1000 (68.9)</td>
<td>Equal to flange rating</td>
</tr>
<tr>
<td>Temperature</td>
<td>Continuous max.</td>
<td>+1832°F (1000°C)</td>
<td></td>
</tr>
<tr>
<td>P x T, max.¹</td>
<td>4122-FC</td>
<td>150,000 [6,100]</td>
<td></td>
</tr>
<tr>
<td>psig x °F (bar x °C)</td>
<td>4122-CMG</td>
<td>600,000 (21,500)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4122-KAMM</td>
<td>Equal to flange rating</td>
<td></td>
</tr>
</tbody>
</table>

**Typical Physical Properties for 4122-FC**: ¹

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Compressibility, range, %</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM F36</td>
<td>35-45</td>
<td>18</td>
</tr>
<tr>
<td>ASTM F38</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>ASTM F152</td>
<td>1,200 [8.3]</td>
<td></td>
</tr>
<tr>
<td>ASTM F1315</td>
<td>85 [1.36]</td>
<td></td>
</tr>
<tr>
<td>ASTM D149</td>
<td>Dielectric Properties, volts/mil.</td>
<td>100</td>
</tr>
</tbody>
</table>

**NOTES:**

1. 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 Engineering.

2. P x T = psig x °F (bar x °C)

* 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 1/16" (1.6mm) gasket thickness unless otherwise mentioned.

**LOW WEIGHT LOSS**

THERMa-PUR™ proprietary formulation resists oxidation and has improved weight loss property by almost 2X when compared to other high temp organic based gaskets such as graphite and vermiculite.

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**GARLOCK**

an EnPro Industries family of companies

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**OUT PERFORMS**

THERMa-PUR™ outperformed vermiculite based gaskets in laboratory testing. THERMa-PUR™ showed significantly less leakage even in extreme thermal cycling condition.¹ For test details, please contact Garlock Engineering.