**ALPHALAM**

**1001**

<table>
<thead>
<tr>
<th>Product Composition</th>
<th>English</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoroplastic Chemical Barrier Compound [cast PTFE film]</td>
<td>0.004 inch</td>
<td>0.10mm</td>
</tr>
<tr>
<td>Custom film colors available upon request</td>
<td>0.042 inch</td>
<td>1.05mm</td>
</tr>
<tr>
<td>Coated Fiberglass Substrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluoroplastic Coating Compound</td>
<td>14.4 oz/yd²</td>
<td>490 g/m²</td>
</tr>
<tr>
<td>100% virgin PTFE resin [35% to 40% by weight]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Test Method</th>
<th>English</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite Weight, Nom</td>
<td>Basis Weight</td>
<td>38.0 oz/yd²</td>
<td>1300 g/m²</td>
</tr>
<tr>
<td>Composite Thickness, Nom</td>
<td>ASTM D1777</td>
<td>.040 inch</td>
<td>1.0mm</td>
</tr>
<tr>
<td>Tensile Strength, Min</td>
<td>ASTM D4851</td>
<td>600 lbs/inch (MD)</td>
<td>6000 N/50mm [MD]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>600 lbs/inch (XD)</td>
<td>6000 N/50mm [XD]</td>
</tr>
<tr>
<td>Permeation Resistance</td>
<td>ASTM F739</td>
<td>0.0 perm</td>
<td>0.0 ng/N</td>
</tr>
<tr>
<td>Trapezoidal Tear Strength, Min</td>
<td>ASTM D4851</td>
<td>50 lbs/inch (MD)</td>
<td>222 N [MD]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 lbs/inch (XD)</td>
<td>222 N [XD]</td>
</tr>
<tr>
<td>Adhesion Strength, Min</td>
<td>ASTM D4851</td>
<td>5 lbs/inch</td>
<td>45 N/50mm</td>
</tr>
<tr>
<td>Flexural Endurance [-1]</td>
<td>ASTM D4851</td>
<td>60% to 100%</td>
<td>75% average</td>
</tr>
<tr>
<td>Low Temperature Resistance</td>
<td>ASTM D1790</td>
<td>Remains Flexible</td>
<td>Remains Flexible</td>
</tr>
<tr>
<td></td>
<td>-75°F [-60°C]</td>
<td>No Delamination</td>
<td>No Delamination</td>
</tr>
<tr>
<td>High Temperature Resistance</td>
<td>ASTM D1790</td>
<td>Remains Flexible</td>
<td>Remains Flexible</td>
</tr>
<tr>
<td></td>
<td>+600°F [+316°C]</td>
<td>No Delamination</td>
<td>No Delamination</td>
</tr>
<tr>
<td>Water Immersion</td>
<td>24 hours @ 73° [23°C]</td>
<td>No Delamination</td>
<td>No Delamination</td>
</tr>
<tr>
<td>Mold Resistance</td>
<td>ASTM C665 / C1338</td>
<td>No Growth</td>
<td>No Growth</td>
</tr>
<tr>
<td></td>
<td>ASTM G21 [both sides]</td>
<td>No Growth</td>
<td>No Growth</td>
</tr>
</tbody>
</table>

¹The AlphaLam composite was investigated for permeation by an independent laboratory. Sulfuric acid [2N] at 5 psig was used as the test medium. The AlphaLam composite exhibited zero breakthrough and/or permeation. Test reports available upon request.

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**DATA SHEET: 14146   REV. A   DATE: 01/01/12**  
*All values are nominal unless otherwise specified.*

**Specializing in marine, aerospace, automotive and commercial fabrics for thermal and industrial applications**

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