



## ALPHALAM 1001

### Product Composition

|  | <u>English</u>          | <u>Metric</u>        |
|--|-------------------------|----------------------|
| Fluoroplastic Chemical Barrier Compound [cast PTFE film] | 0.004 inch              | 0.10mm               |
| Custom film colors available upon request                |                         |                      |
| Coated Fiberglass Substrate                              | 0.042 inch              | 1.05mm               |
| Fluoroplastic Coating Compound                           | 14.4 oz/yd <sup>2</sup> | 490 g/m <sup>2</sup> |
| 100% virgin PTFE resin [35% to 40% by weight]            |                         |                      |

### Physical Property

### Test Method

### English

### Metric

|                                    |  |  |                                      |
|------------------------------------|--|--|--------------------------------------|
| Composite Weight, Nom              | Basis Weight                               | 38.0 oz/yd <sup>2</sup>                | 1300 g/m <sup>2</sup>                |
| Composite Thickness, Nom           | ASTM D1777                                 | .040 inch                              | 1.0mm                                |
| Tensile Strength, Min              | ASTM D4851                                 | 600 lbs/inch (MD)<br>600 lbs/inch (XD) | 6000 N/50mm [MD]<br>6000 N/50mm [XD] |
| Permeation Resistance <sup>1</sup> | ASTM F739                                  | 0.0 perm                               | 0.0 ng/N                             |
| Trapezoidal Tear Strength, Min     | ASTM D4851                                 | 50 lbs/inch (MD)<br>50 lbs/inch (XD)   | 222 N [MD]<br>222 N [XD]             |
| Adhesion Strength, Min             | ASTM D4851                                 | 5 lbs/inch                             | 45 N/50mm                            |
| Flexural Endurance [-1]            | ASTM D4851<br>60% to 100%                  | 75% average                            |                                      |
| Low Temperature Resistance         | ASTM D1790<br>-75°F [-60°C]                | Remains Flexible<br>No Delamination    |                                      |
| High Temperature Resistance        | ASTM D1790<br>+600°F [+316°C]              | Remains Flexible<br>No Delamination    |                                      |
| Water Immersion                    | 24 hours @ 73° [23°C]                      | No Delamination                        |                                      |
| Mold Resistance                    | ASTM C665 / C1338<br>ASTM G21 [both sides] | No Growth<br>No Growth                 |                                      |

<sup>1</sup>The 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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