



ALPHA

engineered composites

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ALPHALAM 1001

Product Composition

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

Physical Property

Test Method

English

Metric

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

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.

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

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