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Boltaron® 9815E

FAR-Rated High Impact Resistant Sheet for Aircraft Interiors

Properties	Test Method*	Typical Values	Typical Values
Specific Gravity	ASTM D792	1.490	1.490
Tensile Strength	ASTM D638	5,500 psi	38.0 MPa
Flexural Strength	ASTM D790	8,700 psi	60.0 MPa
Flexural Modulus	ASTM D790	410,000 psi	2,827 MPa
Izod Impact (notched) @73°F	ASTM D256	5 ft-lb/in.	265 J/m
Hardness, Rockwell R	ASTM D785	107	107
Heat Deflection (annealed)	ASTM D648	170°F (264 psi)	170°F (264 psi)
Thermal Expansion	ASTM D696	1.67 x 10 ⁻⁵ /°F	3.00 x 10 ⁻⁵ /°C

Properties	Test Method*	Typical Values	Typical Values
Flammability			
Vertical Burn, 60 seconds	FAR 25.853(a)(i)	Pass	Pass
Vertical Burn, 12 seconds	FAR 25.853(a)(ii)	Pass	Pass
OSU Heat Release			
Peak - HRR, kW/m ²	FAR 25.853(d)	< 65	< 65
2 Min - HRR, kW-min/m ²	Part IV	< 65	< 65
NBS Smoke			
Ds @ 1.5 min	Far 25.853(d)	< 100	< 100
Ds @ 4 min	Part V	< 200	< 200

*Independent lab tests. All tests at 73°F (22.8°C) in dry conditions unless otherwise noted.

Thermoforming Guidelines	Typical Values	Typical Values
Mold Shrinkage	0.50 - 0.70%	0.50 - 0.70%
Forming Temperature	335°F - 370°F	168°C - 188°C
Typical Heater Settings	30 - 50% Top	50 - 70% Bottom
Drying	Not required	Not required

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