3A Composites Core Materials AIREXÂ® C51.60 Industrial Processing Foam

Category : Other Engineering Material , Composite Core Material , Polymer

Material Notes:

AIREXÂ® C51 is a closed-cell polymer foam with outstanding damage tolerance and formability. Its excellent price / performance ratio uniquely qualifies this core material for high-volume sandwich production. The foam has a high elongation at break and shows good impact properties. It can be formed at room temperature to simple shapes as well as thermoformed to complex three-dimensional parts. The perforation of AIREXÂ® C51â€™s surface ensures a good adhesion to the laminate. The elevated temperature resistance allows short processing cycles with fast curing resin systems, including thermoplastic fiber reinforced skins (GMT) making it very suitable for mass-produced lightweight sandwich structures subjected to both static and dynamic loads.CharacteristicsHigh impact resistance (non-brittle failure mode)Elevated short-period temperature resistanceCold and hot formable to 3-dimensional contoursGood fatigue resistanceSuperior bond strengthLow resin absorptionGood sound and thermal insulationApplicationsRoad and Rail: Car bodies, headliners, deflectors, spoilers, seats, truck panels, side skirts, coversWind Energy: Turbine generator housingsIndustrial: Containers, shelters, covers

Order this product through the following link:
http://www.lookpolymers.com/polymer_3A-Composites-Core-Materials-AIREX-C5160-Industrial-Processing-Foam.php

Physical Properties	Metric	English	Comments
Density	0.0600 g/cc	0.00217 lb/inÂ³	apparent nominal; ISO 845

Mechanical Properties	Metric	English	Comments
Tensile Strength	0.550 MPa	79.8 psi	in the plane; ISO 527 1-2
Elongation at Break	30 %	30 %	shear; ISO 1922
Tensile Modulus	0.0100 GPa	1.45 ksi	in the plane; ISO 527 1-2
Compressive Strength	0.450 MPa	65.3 psi	perpendicular to plane; ISO 844
Compressive Modulus	0.0250 GPa	3.63 ksi	perpendicular to plane; DIN 53421
Shear Modulus	0.00500 GPa	0.725 ksi	ASTM C393
Shear Strength	0.450 MPa	65.3 psi	ISO 1922

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.0360 W/m-K	0.250 BTU-in/hr-ftÂ²-Â°F	ISO 8301

Descriptive Properties	Value	Comments
Color	off white	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China