

3A Composites Core Materials AIREX® T92.110 Easy Processing Structural Foam

Category : Other Engineering Material , Composite Core Material , Polymer , Thermoplastic

Material Notes:

AIREX® T92 is a closed-cell, thermoplastic and recyclable polymer foam with very good mechanical properties and price / performance ratio. It has a good resistance to fatigue, is chemically stable, UV resistant and has negligible water absorption. It is thermally stable during high temperature processing and post curing without after expansion or out-gassing. T92 is designed for easy use with all resin systems and processing technologies. AIREX® T92 is ideally suited as a core material for a wide variety of lightweight sandwich structures subjected to static and dynamic loads and/or exposed to elevated temperatures during manufacturing. Characteristics Easy to process with all types of resin and lamination processes High process temperature up to 150°C (302°F) Excellent fatigue strength High compression and shear properties Very low variance of mechanical properties Excellent chemical stability Good adhesion (skin-to-core bond) Excellent long term thermal stability up to 100°C (212°F) No water absorption No after expansion, no out-gassing Applications Wind energy: Blades (shear webs & shells), nacelles Marine: Hulls, decks, superstructures, bulkheads, transoms, interiors stringers Industrial: Cover, containers, local reinforcements, x-ray tables, sporting goods

Order this product through the following link:

http://www.lookpolymers.com/polymer_3A-Composites-Core-Materials-AIREX-T92110-Easy-Processing-Structural-Foam.php

Physical Properties	Metric	English	Comments
Density	0.115 g/cc	0.00415 lb/in ³	average; ISO 845
	0.112 - 0.122 g/cc	0.00405 - 0.00441 lb/in ³	typical range; ISO 845

Mechanical Properties	Metric	English	Comments
Tensile Strength	>= 1.80 MPa	>= 261 psi	perpendicular to plane; ASTM C297
	2.90 MPa	421 psi	average; perpendicular to plane; ASTM C297
Elongation at Break	>= 10 %	>= 10 %	shear; ISO 1922
	15 %	15 %	average; shear; ISO 1922
Tensile Modulus	>= 0.100 GPa	>= 14.5 ksi	perpendicular to plane; ASTM C297
	0.145 GPa	21.0 ksi	average; perpendicular to plane; ASTM C297
Compressive Strength	>= 1.45 MPa	>= 210 psi	perpendicular to plane; ISO 844
	1.80 MPa	261 psi	average; perpendicular to plane; ISO 844
Compressive Modulus	>= 0.0800 GPa	>= 11.6 ksi	perpendicular to plane; DIN 53421
	0.110 GPa	16.0 ksi	average; perpendicular to plane; DIN 53421

Mechanical Properties	Metric	English	Comments
Shear Modulus	0.0230 GPa	3.34 ksi	ASTM C393
	0.0230 GPa	3.34 ksi	average; ASTM C393
Shear Strength	>= 0.900 MPa	>= 131 psi	ISO 1922
	1.05 MPa	152 psi	average; ISO 1922

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.0350 W/m-K	0.243 BTU-in/hr-ft ² -°F	ISO 8301

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