

## 3A Composites Core Materials AIREX® C70.90 Universal Structural Foam

Category : Other Engineering Material , Composite Core Material , Polymer

### Material Notes:

AIREX® C70 is a closed cell, crosslinked polymer foam that combines excellent stiffness and strength to weight ratios with superior toughness. It is non-friable, contains no CFC's, has negligible water absorption, and provides an excellent resistance to chemicals. A fine cell structure offers an excellent bonding surface. Compatible with most resins and manufacturing processes AIREX® C70 is ideally suited as a core material for a wide variety of lightweight sandwich structures subjected to both static and dynamic loads.

**Characteristics** outstanding strength and stiffness to weight ratios Good impact strength Low resin absorption High fatigue resistance Good fire performance (self-extinguishing) Sound and thermal insulation Good styrene resistance

**Applications** Marine: Hulls, decks, bulkheads, superstructures, interiors Road and Rail: Roof panels, interiors, floors, doors, partition walls, side skirts, front-ends Aircraft: Interiors, radomes, galley carts, general aviation (fuselage and wing) Recreation: Skis, snowboards, surfboards, wakeboards, canoes, kayaks Industrial: Tooling, tanks, ductwork, containers, covers

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_3A-Composites-Core-Materials-AIREX-C7090-Universal-Structural-Foam.php](http://www.lookpolymers.com/polymer_3A-Composites-Core-Materials-AIREX-C7090-Universal-Structural-Foam.php)

Physical Properties	Metric	English	Comments
Density	0.100 g/cc	0.00361 lb/in <sup>3</sup>	average; ISO 845
	0.0900 - 0.115 g/cc	0.00325 - 0.00415 lb/in <sup>3</sup>	typical range; ISO 845

Mechanical Properties	Metric	English	Comments
Tensile Strength	>= 2.20 MPa	>= 319 psi	in the plane; ISO 527 1-2
	2.70 MPa	392 psi	average; in the plane; ISO 527 1-2
Elongation at Break	>= 12 %	>= 12 %	shear; ISO 1922
	23 %	23 %	average; shear; ISO 1922
Tensile Modulus	>= 0.0650 GPa	>= 9.43 ksi	in the plane; ISO 527 1-2
	0.0840 GPa	12.2 ksi	average; in the plane; ISO 527 1-2
Compressive Strength	>= 1.70 MPa	>= 247 psi	perpendicular to plane; ISO 844
	2.00 MPa	290 psi	average; perpendicular to plane; ISO 844
Compressive Modulus	>= 0.110 GPa	>= 16.0 ksi	perpendicular to plane; DIN 53421
	0.130 GPa	18.9 ksi	average; perpendicular to plane; DIN 53421
Shear Modulus	>= 0.0340 GPa	>= 4.93 ksi	ASTM C393
	0.0400 GPa	5.80 ksi	average; ASTM C393

Mechanical Properties	Metric	English	Comments
Shear Strength	1.70 MPa	247 psi	ISO 1922
	1.70 MPa	247 psi	average; ISO 1922

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

Descriptive Properties	Value	Comments
Color	red	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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