

Azdel Plus R401-B01 40% Continuous Random Fiber Mat / PP Resin Matrix

Category : Polymer , Thermoplastic , Polypropylene (PP)

Material Notes:

AZDEL® R401-B01 is a glass mat thermoplastic laminate based upon a random oriented continuous fiber mat contained within a polypropylene resin matrix. This composite material features high flow properties and a very homogeneous fiber distribution. This material is typically used for standard semi-structural applications where high stiffness and impact are desired. Mechanical properties and mold shrinkage measured on flat plaques. Information provided by Azdel.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Azdel-Plus-R401-B01-40-Continuous-Random-Fiber-Mat-PP-Resin-Matrix.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.19 g/cc	1.19 g/cc	Laminate; ASTM D792
	1.21 g/cc	1.21 g/cc	Molded; ASTM D792
Filler Content	40 %	40 %	By weight (ashing); Internal
Thickness	3700 microns	146 mil	Sheet; Internal
Linear Mold Shrinkage	0.0010 - 0.0030 cm/cm	0.0010 - 0.0030 in/in	Measured on flat plaques; ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	108 MPa	15700 psi	ISO 527
Elongation at Break	2.5 %	2.5 %	ISO 527
Tensile Modulus	6.16 GPa	893 ksi	ISO 527
Flexural Strength	160 MPa	23200 psi	ISO 178
Flexural Modulus	6.15 GPa	892 ksi	ISO 178
Poissons Ratio	0.361	0.361	ISO 527
Izod Impact, Notched	8.10 J/cm	15.2 ft-lb/in	ISO 180
	@Thickness 4.00 mm, Temperature 23.0 °C	@Thickness 0.157 in, Temperature 73.4 °F	
Impact	384	384	Multi-axial in kg, at max. load; ASTM D3763
	@Thickness 4.00 mm	@Thickness 0.157 in	
Impact Test	15.0 J	11.1 ft-lb	Multi-axial, at max. load; ASTM D3763
	@Thickness 4.00 mm	@Thickness 0.157 in	
	28.0 J	20.7 ft-lb	Multi-axial, at failure; ASTM D3763

Mechanical Properties	@Thickness 4.00 mm Metric	@Thickness 0.157 in English	Comments
Thermal Properties	Metric	English	Comments
CTE, linear	43.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @Temperature -40.0 - 120 $^\circ\text{C}$	23.9 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @Temperature -40.0 - 248 $^\circ\text{F}$	ASTM E831
Deflection Temperature at 1.8 MPa (264 psi)	154 $^\circ\text{C}$	309 $^\circ\text{F}$	ASTM D648
Flame Spread	2.8 mm/min	0.11 in/min	FMVSS302

Descriptive Properties	Value	Comments
Color	Black	Internal

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