

Hexcel® HexPly® M12 135°C Curing Epoxy Matrix, 45% 46280 Fiber

Category : Polymer , Thermoset , Epoxy , Epoxy Cure Resin

Material Notes:

Information provided by HexCel

Order this product through the following link:

http://www.lookpolymers.com/polymer_Hexcel-HexPly-M12-135C-Curing-Epoxy-Matrix-45-46280-Fiber.php

Physical Properties	Metric	English	Comments
Density	1.24 g/cc	0.0448 lb/in ³	Resin Density
	1.75 g/cc	0.0632 lb/in ³	Fibre Density

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	550 MPa	79800 psi	RT; Dry; EN2561
	650 MPa	94300 psi	90°, RT, Dry; EN2561
	600 MPa	87000 psi	90°, Wet; EN2561
	@Temperature 75.0 °C	@Temperature 167 °F	
	600 MPa	87000 psi	90°, Wet; EN2561
	@Temperature 100 °C	@Temperature 212 °F	
	650 MPa	94300 psi	Wet; EN2561
	@Temperature 75.0 °C	@Temperature 167 °F	
	700 MPa	102000 psi	Wet; EN2561
	@Temperature 100 °C	@Temperature 212 °F	
Tensile Modulus	57.0 GPa	8270 ksi	90°, RT, Dry; EN2561
	65.0 GPa	9430 ksi	RT; Dry; EN2561
	60.0 GPa	8700 ksi	90°, Wet; EN2561
	@Temperature 75.0 °C	@Temperature 167 °F	
	62.0 GPa	8990 ksi	Wet; EN2561
	@Temperature 100 °C	@Temperature 212 °F	
	63.0 GPa	9140 ksi	90°, Wet; EN2561
	@Temperature 100 °C	@Temperature 212 °F	
	66.0 GPa	9570 ksi	Wet; EN2561
	@Temperature 75.0 °C	@Temperature 167 °F	

Mechanical Properties	Metric	English	Comments
	730 MPa	106000 psi	90°, RT, Dry; DIN65380
	415 MPa	60200 psi	Wet; DIN65380
	@Temperature 100 °C	@Temperature 212 °F	
	435 MPa	63100 psi	90°, Wet; DIN65380
	@Temperature 100 °C	@Temperature 212 °F	
	495 MPa	71800 psi	90°, Wet; DIN65380
	@Temperature 75.0 °C	@Temperature 167 °F	
	500 MPa	72500 psi	Wet; DIN65380
	@Temperature 75.0 °C	@Temperature 167 °F	
Compressive Modulus	57.0 GPa	8270 ksi	RT; Dry; DIN65380
	61.0 GPa	8850 ksi	90°, RT, Dry; DIN65380
	50.0 GPa	7250 ksi	90°, Wet; DIN65380
	@Temperature 100 °C	@Temperature 212 °F	
	52.0 GPa	7540 ksi	Wet; DIN65380
	@Temperature 100 °C	@Temperature 212 °F	
	53.0 GPa	7690 ksi	Wet; DIN65380
	@Temperature 75.0 °C	@Temperature 167 °F	
	60.0 GPa	8700 ksi	90°, Wet; DIN65380
	@Temperature 75.0 °C	@Temperature 167 °F	
Shear Strength	60.0 MPa	8700 psi	0°, ILSS (Short Beam), RT, Dry; EN2563
	75.0 MPa	10900 psi	In-Plane, RT, Dry; EN6031
	35.0 MPa	5080 psi	0°, ILSS (Short Beam), Wet; EN2563
	@Temperature 100 °C	@Temperature 212 °F	
	42.0 MPa	6090 psi	0°, ILSS (Short Beam), Wet; EN2563
	@Temperature 75.0 °C	@Temperature 167 °F	
	58.0 MPa	8410 psi	In-Plane, Wet; EN6031
	@Temperature 100 °C	@Temperature 212 °F	
	68.0 MPa	9860 psi	In-Plane, Wet; EN6031
	@Temperature 75.0 °C	@Temperature 167 °F	

Mechanical Properties	Metric	English	Comments
Processing Properties	Metric	English	Comments
Shelf Life	14.0 Month	14.0 Month	
	@Temperature -18.0 °C	@Temperature -0.400 °F	

Descriptive Properties	Value	Comments
Cured Thickness per Ply (cm)	0.38	
Fiber Volume (%)	50	

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