

## Hexcel® HexPly® M65 Bismaleimide Resin, Carbon Fabric Form

Category : Polymer , Thermoset , Polyimide, TS

**Material Notes:**

Fibers: T300-3K, AS4C-3K Information provided by HexCel

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Hexcel-HexPly-M65-Bismaleimide-Resin-Carbon-Fabric-Form.php](http://www.lookpolymers.com/polymer_Hexcel-HexPly-M65-Bismaleimide-Resin-Carbon-Fabric-Form.php)

Physical Properties	Metric	English	Comments
Density	1.52 g/cc	0.0549 lb/in <sup>3</sup>	Laminate
Volatiles	<= 2.0 %	<= 2.0 %	Prepreg

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	744 MPa	108000 psi	T300; Fill Tension; (AMB)
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	841 MPa	122000 psi	AS4C; Fill Tension; (AMB)
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Modulus	55.8 GPa	8090 ksi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	56.3 GPa	8170 ksi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Yield Strength	520 MPa	75400 psi	AS4C; Fill Flexure; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	552 MPa	80100 psi	T300; Fill Flexure; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	710 MPa	103000 psi	AS4C; Fill Flexure;
	@Temperature 232 °C	@Temperature 450 °F	
	758 MPa	110000 psi	T300; Fill Flexure; AMB
	@Temperature 232 °C	@Temperature 450 °F	
	917 MPa	133000 psi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	1041 MPa	151000 psi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	51.3 GPa Metric	7440 ksi English	Comments AS4C; Fill Flexure; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	52.0 GPa	7540 ksi	AS4C; Fill Flexure; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	54.0 GPa	7830 ksi	T300; Fill Flexure; AMB
	@Temperature 232 °C	@Temperature 450 °F	
	54.0 GPa	7830 ksi	AS4C; Fill Flexure;
	@Temperature 232 °C	@Temperature 450 °F	
	56.8 GPa	8240 ksi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	57.0 GPa	8270 ksi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Compressive Yield Strength	408 MPa	59200 psi	AS4C; Fill Compression; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	438 MPa	63500 psi	T300; Fill Compression; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	510 MPa	74000 psi	T300; Fill Compression; AMB
	@Temperature 232 °C	@Temperature 450 °F	
	531 MPa	77000 psi	AS4C; Fill Compression;
	@Temperature 232 °C	@Temperature 450 °F	
	786 MPa	114000 psi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	889 MPa	129000 psi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Compressive Modulus	8.18 GPa	1190 ksi	T300; Fill Compression; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	8.40 GPa	1220 ksi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Shear Modulus	1.40 GPa	203 ksi	T300; In Plane; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	1.60 GPa	232 ksi	

Mechanical Properties	Metric @ Temperature 177 °C	English @ Temperature 351 °F	AS4C; In Plane; Wet condition Comments
	2.70 GPa	392 ksi	T300; In Plane; AMB
	@Temperature 232 °C	@Temperature 450 °F	
	2.70 GPa	392 ksi	AS4C; In Plane
	@Temperature 232 °C	@Temperature 450 °F	
	4.50 GPa	653 ksi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	4.50 GPa	653 ksi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Shear Strength	34.0 MPa	4930 psi	AS4C; Fill Short Beam; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	39.0 MPa	5660 psi	T300; Fill Short Beam; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	50.0 MPa	7250 psi	AS4C; Fill Short Beam
	@Temperature 232 °C	@Temperature 450 °F	
	54.0 MPa	7830 psi	T300; Fill Short Beam; AMB
	@Temperature 232 °C	@Temperature 450 °F	
	67.0 MPa	9720 psi	AS4C; In Plane
	@Temperature 232 °C	@Temperature 450 °F	
	68.0 MPa	9860 psi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	70.0 MPa	10200 psi	T300; In Plane; AMB
	@Temperature 232 °C	@Temperature 450 °F	
	70.0 MPa	10200 psi	AS4C; In Plane; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	79.0 MPa	11500 psi	T300; In Plane; Wet condition
	@Temperature 177 °C	@Temperature 351 °F	
	103 MPa	14900 psi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	120 MPa	17400 psi	
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	Metric <sup>Pa</sup>	English <sup>psi</sup>	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Descriptive Properties	Value	Comments
Cured Thickness per Ply (cm)	0.0212	Laminate
Dry Resin Content (%)	40	Prepreg
Fiber Volume (%)	51	Laminate

## 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