

## Hexcel® HexPly® 8552 Epoxy Matrix, AS4 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-8552-Epoxy-Matrix-AS4-Fiber.php](http://www.lookpolymers.com/polymer_Hexcel-HexPly-8552-Epoxy-Matrix-AS4-Fiber.php)

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	75.2 MPa	10900 psi	90°, Dry
	@Temperature 93.3 °C	@Temperature 200 °F	
	80.7 MPa	11700 psi	90°, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	438 MPa	63500 psi	Open Hole Tensile, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	738 MPa	107000 psi	Quasi-Isotropic 25/50/25, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	1900 MPa	276000 psi	0°, Dry
	@Temperature -55.0 °C	@Temperature -67.0 °F	
	2020 MPa	293000 psi	0°, Dry
	@Temperature 90.6 °C	@Temperature 195 °F	
	2140 MPa	310000 psi	0°, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Tensile Modulus	8.41 GPa	1220 ksi	90°, Dry
	@Temperature 200 °C	@Temperature 392 °F	
	9.58 GPa	1390 ksi	90°, Dry
	@Temperature 77.0 °C	@Temperature 171 °F	
	132 GPa	19100 ksi	0°, Dry
	@Temperature 195 °C	@Temperature 383 °F	
	134 GPa	19400 ksi	0°, Dry
	@Temperature -67.0 °C	@Temperature -88.6 °F	
	135 GPa	19600 ksi	0°, Dry
	@Temperature 77.0 °C	@Temperature 171 °F	

Mechanical Properties	1890 MPa Metric	274000 psi English	Comments
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Flexural Modulus	127 GPa	18400 ksi	0°, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Compressive Yield Strength	186 MPa	27000 psi	After 2500 in-in-lb/in impact, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	193 MPa	28000 psi	After 2000 in-in-lb/in impact, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	221 MPa	32000 psi	After 1500 in-in-lb/in impact, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	239 MPa	34600 psi	Compression After Impact, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	345 MPa	50000 psi	After 500 in-in-lb/in impact, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	629 MPa	91200 psi	Compression Before Impact, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	1270 MPa	184000 psi	0°, Dry
	@Temperature 90.6 °C	@Temperature 195 °F	
	1270 MPa	184000 psi	0°, Wet
	@Temperature 90.6 °C	@Temperature 195 °F	
	1400 MPa	203000 psi	0°, Wet
	@Temperature 71.1 °C	@Temperature 160 °F	
	1530 MPa	222000 psi	0°, Dry
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	1590 MPa	230000 psi	0°, Dry
	@Temperature -55.0 °C	@Temperature -67.0 °F	
Compressive Modulus	117 GPa	17000 ksi	0°, Wet
	@Temperature 71.1 °C	@Temperature 160 °F	
	122 GPa	17700 ksi	0°, Dry
	@Temperature 90.6 °C	@Temperature 195 °F	
	124 GPa	18000 ksi	

Mechanical Properties	Metric @Temperature -55.0 °C	English @Temperature -67.0 °F	0° Dry Comments
	125 GPa @Temperature 90.6 °C	18100 ksi @Temperature 195 °F	0°, Wet
	128 GPa @Temperature 25.0 °C	18600 ksi @Temperature 77.0 °F	0°, Dry
Shear Strength	77.9 MPa @Temperature 90.6 °C	11300 psi @Temperature 195 °F	0° Short Beam, Wet
	84.1 MPa @Temperature 71.1 °C	12200 psi @Temperature 160 °F	0° Short Beam, Wet
	101 MPa @Temperature 90.6 °C	14700 psi @Temperature 195 °F	0° Short Beam, Dry
	105 MPa @Temperature 93.3 °C	15200 psi @Temperature 200 °F	+/- 45° In-Plane, Dry
	114 MPa @Temperature 25.0 °C	16600 psi @Temperature 77.0 °F	+/- 45° In-Plane, Dry
	117 MPa @Temperature 25.0 °C	16900 psi @Temperature 77.0 °F	0° Short Beam, Wet
	128 MPa @Temperature 25.0 °C	18500 psi @Temperature 77.0 °F	0° Short Beam, Dry
	164 MPa @Temperature -55.0 °C	23800 psi @Temperature -67.0 °F	0° Short Beam, Dry

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	121 °C	250 °F	Epoxy Matrix Limit

## Contact Songhan Plastic Technology Co.,Ltd.

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