

## Zyvex Performance Materials Arovex™ 250 Carbon Nanotube Strengthened Prepreg

Category : Polymer , Thermoset , Carbon Fiber/Thermoset Composite

### Material Notes:

Arovex® 250 Prepreg is a 180°F (82°C) to 280°F (138°C) curing carbon nanotube strengthened epoxy prepreg suitable for numerous composites applications. Normal curing takes place at 250°F (121°C). Arovex 250 resin contains an optimum level of carbon nanotubes for additional toughness and enhanced mechanical properties. The carbon nanotubes use molecular dispersion technology to ensure enhancements are evenly distributed throughout the resin. Features: Very high toughness High strength High stiffness Enhanced mechanical properties Excellent retention of tack and drape

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Zyvex-Performance-Materials-Arovex-250-Carbon-Nanotube-Strengthened-Prepreg.php](http://www.lookpolymers.com/polymer_Zyvex-Performance-Materials-Arovex-250-Carbon-Nanotube-Strengthened-Prepreg.php)

Physical Properties	Metric	English	Comments
Viscosity	0.050 cP	0.050 cP	Rheology, 2°C/min
	@Temperature 120 °C	@Temperature 248 °F	
	0.070 cP	0.070 cP	Rheology, 2°C/min
	@Temperature 80.0 °C	@Temperature 176 °F	
1.0 cP	1.0 cP	Rheology, 2°C/min	
@Temperature 40.0 °C	@Temperature 104 °F		
	100 cP	100 cP	Rheology, 2°C/min
	@Temperature 140 °C	@Temperature 284 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength	46.2 MPa	6700 psi	90°; ASTM D3039
	2560 MPa	371000 psi	0°; ASTM D3039
Tensile Modulus	9.65 GPa	1400 ksi	90°; ASTM D3039
	152 GPa	22000 ksi	0°; ASTM D3039
Flexural Strength	113 MPa	16400 psi	90°; ASTM D790
	1830 MPa	265000 psi	0°; ASTM D790
Flexural Modulus	8.96 GPa	1300 ksi	90°; ASTM D790
	176 GPa	25500 ksi	0°; ASTM D790
Compressive Strength	224 MPa	32500 psi	90°; SACMA SRM 1R-94
	1170 MPa	170000 psi	0°; SACMA SRM 1R-94

Mechanical Properties	Metric	English	Comments
Compressive Modulus	10.3 GPa	1500 ksi	90°; SACMA SRM 1R-94
	141 GPa	20400 ksi	0°; SACMA SRM 1R-94
Poissons Ratio	0.34	0.34	ASTM D3039
Shear Strength	82.7 MPa	12000 psi	Short Beam; ASTM D2344

Thermal Properties	Metric	English	Comments
Glass Transition Temp, Tg	138 °C	280 °F	ASTM D702807

Processing Properties	Metric	English	Comments
Cure Time	30.0 min	0.500 hour	
	@Temperature 137.8 °C	@Temperature 280.0 °F	
	120 min	2.00 hour	
	@Temperature 121.1 °C	@Temperature 250.0 °F	
	120 min	2.00 hour	80 psi
	@Temperature 121 °C	@Temperature 250 °F	
	240 min	4.00 hour	
	@Temperature 104.4 °C	@Temperature 219.9 °F	
Gel Time	360 min	6.00 hour	
	@Temperature 93.3 °C	@Temperature 200 °F	
	720 min	12.0 hour	
	@Temperature 82.2 °C	@Temperature 180 °F	
	5.00 min	5.00 min	
	@Temperature 137.8 °C	@Temperature 280.0 °F	
	13.0 min	13.0 min	
@Temperature 121.1 °C	@Temperature 250.0 °F		
33.0 min	33.0 min		
@Temperature 104.4 °C	@Temperature 219.9 °F		
68.0 min	68.0 min		
@Temperature 93.3 °C	@Temperature 200 °F		
168 min	168 min		
@Temperature 82.2 °C	@Temperature 180 °F		

Processing Properties	Metric <sup>cnth</sup>	English <sup>nth</sup>	Comments
Shear Life	@Temperature -17.8 °C	@Temperature 0.000 °F	

Descriptive Properties	Value	Comments
Glc Strain Release Energy	3.0 in-lb/in <sup>2</sup>	ASTM D5528-07

## 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