

## Renegade Materials Corporation RM-5001 Cyanate Ester Prepreg, 6781 S2 Glass Fabric

Category : Polymer , Thermoset , Filled/Reinforced Thermoset

### Material Notes:

RM-5001 cyanate ester is a very low outgassing, toughened, high performance prepreg. Straightforward 350°F Cure Designed for the unique requirements of satellite and missile structures Low shrinkage during cure Developed for consistent handling and superior performance Continuous service up to and including 350°F with post cure Available in woven and unidirectional product forms using all fibers including carbon, quartz and S2 glass Nano-enhancement for tailored laminate properties and multi-functional performance Low moisture absorption Information provided by Renegade Materials Corporation.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Renegade-Materials-Corporation-RM-5001-Cyanate-Ester-Prepreg-6781-S2-Glass-Fabric.php](http://www.lookpolymers.com/polymer_Renegade-Materials-Corporation-RM-5001-Cyanate-Ester-Prepreg-6781-S2-Glass-Fabric.php)

Physical Properties	Metric	English	Comments
Density	1.19 g/cc	0.0430 lb/in <sup>3</sup>	Resin
Moisture Absorption at Equilibrium	1.1 %	1.1 %	Post cured at 350°F
	1.2 %	1.2 %	Post cured at 450°F

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	601 MPa	87200 psi	Prepreg, Warp Direction, RT, Dry, Normalized to 60% fiber volume fraction; ASTM D3039
Elongation at Break	4.0 %	4.0 %	Resin
Tensile Modulus	32.4 GPa	4700 ksi	Prepreg, Warp Direction, RT, Dry, Normalized to 60% fiber volume fraction; ASTM D3039
Flexural Strength	101 MPa	14600 psi	Resin, RT, Wet
	103 MPa	15000 psi	Resin, RT, Dry
Flexural Modulus	849.4 MPa	123200 psi	Prepreg, Warp Direction, RT, Dry, Normalized to 60% fiber volume fraction; ASTM D7264
	3.17 GPa	460 ksi	Resin, RT, Dry; ASTM D6272
Flexural Modulus	3.17 GPa	460 ksi	Resin, RT, Wet
	35.9 GPa	5200 ksi	Prepreg, Warp Direction, RT, Dry, Normalized to 60% fiber volume fraction; ASTM D7264
Shear Strength	66.2 MPa	9600 psi	Interlaminar, RT, Dry; ASTM D2344

Thermal Properties	Metric	English	Comments
Glass Transition Temp, Tg	166 °C	331 °F	Resin, Wet, Cured at 450°F
	227 °C	441 °F	Resin, Dry, Cured at 350°F

Electrical Properties	Metric	English	Comments
Dielectric Constant	2.66	2.66	
	@Frequency 2.00e+9 - 1.80e+10 Hz	@Frequency 2.00e+9 - 1.80e+10 Hz	
Dissipation Factor	0.0050	0.0050	

## Contact Songhan Plastic Technology Co.,Ltd.

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