

Park Electrochemical Nelcote® S-860 Silicone Prepreg, 1581-112NPH E-Glass Reinforced

Category : Polymer , Thermoset , Silicone

Material Notes:

Nelcote® S-860 is a MIL-P-25518 type silicone resin with a good combination of electrical and high temperature properties. GMS4001 qualified specifications
Key Features and Benefits: 500°F maximum service temperature
 Good electrical and mechanical properties at high temperatures
 Low out-gassing for space applications
Applications/Qualifications: Radomes Aircraft Structures
 Information provided by Park Electrochemical Corp.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Park-Electrochemical-Nelcote-S-860-Silicone-Prepreg-1581-112NPH-E-Glass-Reinforced.php

Physical Properties	Metric	English	Comments
Density	1.76 g/cc	0.0636 lb/in³	
Volatiles	<= 2.5 % @Temperature 163 °C	<= 2.5 % @Temperature 325 °F	8 min

Mechanical Properties	Metric	English	Comments
Hardness, Barcol	59	59	
Tensile Strength, Yield	221 MPa @Temperature 23.9 °C	32000 psi @Temperature 75.0 °F	0° Direction, Dry; ASTM D638 Type 1
Tensile Modulus	18.6 GPa @Temperature 23.9 °C	2700 ksi @Temperature 75.0 °F	0° Direction, Dry; ASTM D638 Type 1
Flexural Strength	283 MPa @Temperature 23.9 °C	41000 psi @Temperature 75.0 °F	Dry; ASTM D790
Flexural Modulus	18.6 GPa @Temperature 23.9 °C	2700 ksi @Temperature 75.0 °F	Dry; ASTM D790
Compressive Strength	165 MPa @Temperature 23.9 °C	24000 psi @Temperature 75.0 °F	Dry; ASTM D695
Compressive Modulus	19.3 GPa @Temperature 23.9 °C	2800 ksi @Temperature 75.0 °F	Dry; ASTM D695

Electrical Properties	Metric	English	Comments
Dielectric Constant	4.15 @Frequency 9.375e+9	4.15 @Frequency 9.375e+9	

Electrical Properties	Hz Metric	Hz English	Comments
Dissipation Factor	0.013 @Frequency 9.375e+9 Hz	0.013 @Frequency 9.375e+9 Hz	

Processing Properties	Metric	English	Comments
Gel Time	3.00 - 4.00 min	3.00 - 4.00 min	
Shelf Life	3.00 Month @Temperature 4.44 °C	3.00 Month @Temperature 40.0 °F	
	6.00 Month @Temperature -17.8 °C	6.00 Month @Temperature 0.000 °F	

Descriptive Properties	Value	Comments
Fabric Area Weight (g/m²)	302	
Prepreg Resin Content (%)	31-41	
Resin Flow (%)	10-16	340°F, 10psi

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