

Park Electrochemical Nelcote® F-502 Phenolic Prepreg, 12K GA090 Uni Tape Reinforced

Category : Polymer , Thermoset , Phenolic

Material Notes:

Nelcote® F-502 is a MIL-R-9299 phenolic resin system suitable for impregnation on any MIL-C-9084 fabric with a compatible finish. F-502 is used in the manufacture of ablative reinforcements in rocket nozzles, as well as ducting and secondary structures. GMS4001 qualified specifications. Key Features and Benefits: Provides a combination of high-strength and ablative properties for demanding applications. Low thermal expansion. Good Tack and Drape properties. Conforms to MIL-R-9299 Type B. Applications/Qualifications: Rocket Nozzles, Ducting, Secondary Structures. Information provided by Park Electrochemical Corp.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Park-Electrochemical-Nelcote-F-502-Phenolic-Prepreg-12K-GA090-Uni-Tape-Reinforced.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.45 g/cc	1.45 g/cc	ASTM D792
Volatiles	3.0 - 5.0 % @Temperature 135 °C	3.0 - 5.0 % @Temperature 275 °F	8 min
Thickness	254 microns	10.0 mil	cured laminate, per ply

Mechanical Properties	Metric	English	Comments
Hardness, Barcol	75	75	ASTM D2583
Tensile Strength, Yield	1550 MPa @Temperature 23.9 °C	225000 psi @Temperature 75.0 °F	0° Direction, Dry; 325°F, 1000psi Cured; ASTM D638
Tensile Modulus	96.5 GPa @Temperature 23.9 °C	14000 ksi @Temperature 75.0 °F	0° Direction, Dry; 325°F, 1000psi Cured; ASTM D638
Compressive Strength	689 MPa @Temperature 23.9 °C	100000 psi @Temperature 75.0 °F	Dry; 325°F, 1000psi Cured; ASTM D695
Compressive Modulus	96.5 GPa @Temperature 23.9 °C	14000 ksi @Temperature 75.0 °F	Dry; 325°F, 1000psi Cured; ASTM D695

Processing Properties	Metric	English	Comments
Gel Time	0.800 - 3.30 min	0.800 - 3.30 min	
Shelf Life	3.00 Month @Temperature 4.44 °C	3.00 Month @Temperature 40.0 °F	
	6.00 Month	6.00 Month	

Processing Properties	Metric	English	Comments
-----------------------	--------	---------	----------

@ Temperature -17.8 °C

@ Temperature 0.000 °F

Descriptive Properties	Value	Comments
Fabric Area Weight (g/m ²)	300	
Prepreg Resin Content (%)	32-38	
Resin Flow (%)	5-20	325°F, 15psi

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