

## Park Electrochemical Nelcote® F-555 Phenolic Prepreg, Glass Reinforced

Category : Polymer , Thermoset , Phenolic

### Material Notes:

Nelcote® F-555 is a carbon-filled MIL-R-9299 phenolic resin optimized for coating Carbonized Rayon cloth. F-555 is used extensively in the manufacture of high temperature rocket nozzles, heat shields, and combustion chambers. Key Features and Benefits: Provides a combination of high-strength and ablative properties for demanding applications. Low thermal expansion. Good Tack and Drape properties. Applications/Qualifications: Rocket Nozzles, Combustion Chambers, Heat Shields, Rocket Motor Throat Sections. Information provided by Park Electrochemical Corp.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Park-Electrochemical-Nelcote-F-555-Phenolic-Prepreg-Glass-Reinforced.php](http://www.lookpolymers.com/polymer_Park-Electrochemical-Nelcote-F-555-Phenolic-Prepreg-Glass-Reinforced.php)

Physical Properties	Metric	English	Comments
Specific Gravity	2.08 g/cc	2.08 g/cc	18oz. woven roving form; ASTM D792
Volatiles	2.0 - 5.0 %	2.0 - 5.0 %	5 min
	@Temperature 163 °C	@Temperature 325 °F	
Thickness	508 microns	20.0 mil	per ply, 18oz. woven roving form

Mechanical Properties	Metric	English	Comments
Hardness, Barcol	68	68	18oz. woven roving form; ASTM D2583
Tensile Strength, Yield	352 MPa	51000 psi	0° Direction, Dry; 18oz. Woven roving form; ASTM D638
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Tensile Modulus	29.0 GPa	4200 ksi	0° Direction, Dry; 18oz. Woven roving form; ASTM D638
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Flexural Strength	229 MPa	33200 psi	Dry; 18oz. Woven roving form; ASTM D790
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Flexural Modulus	23.4 GPa	3400 ksi	Dry; 18oz. Woven roving form; ASTM D790
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Compressive Strength	152 MPa	22000 psi	Dry; 18oz. Woven roving form; ASTM D695
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Compressive Modulus	32.4 GPa	4700 ksi	Dry; 18oz. Woven roving form; ASTM D695
	@Temperature 23.9 °C	@Temperature 75.0 °F	

Processing Properties	Metric	English	Comments
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Processing Properties	6.00 Month Metric	6.00 Month English	Comments
	@Temperature 4.44 °C	@Temperature 40.0 °F	

Descriptive Properties	Value	Comments
Fabric Area Weight (g/m <sup>2</sup> )	610	
Prepreg Resin Content (%)	28-34	

## Contact Songhan Plastic Technology Co.,Ltd.

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