

## Park Electrochemical Nelcote® E-761 Epoxy Prepreg, 285 Kevlar® Reinforced

Category : Polymer , Thermoset , Epoxy

### Material Notes:

Nelcote® E-761 is a versatile self-adhesive epoxy matrix for use in aerospace and commercial application where ease of processing and cost are key considerations. Key Features and Benefits: Controlled flow for ease of processing Self adhesive for honeycomb or foam sandwich laminates without the use of film adhesive Flexible cure temperature 180°F to 250°F Good electrical properties Flame and fire retardant per FAR 25.853 Wet service temperatures up to 160°F Applications/Qualifications: Radomes Aircraft Interiors Secondary Aircraft Structures Sandwich Panels MRI Resonators Widely specified on commercial and military aircraft programs Information provided by Park Electrochemical Corp.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Park-Electrochemical-Nelcote-E-761-Epoxy-Prepreg-285-Kevlar-Reinforced.php](http://www.lookpolymers.com/polymer_Park-Electrochemical-Nelcote-E-761-Epoxy-Prepreg-285-Kevlar-Reinforced.php)

Physical Properties	Metric	English	Comments
Volatiles	<= 2.0 %	<= 2.0 %	8 min
	@Temperature 135 °C	@Temperature 275 °F	
Thickness	229 microns	9.00 mil	Per Ply

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	421 MPa	61000 psi	0° Direction, Wet; ASTM D638
	@Temperature 21.1 °C	@Temperature 70.0 °F	
	524 MPa	76000 psi	0° Direction, Dry; ASTM D638
	@Temperature 21.1 °C	@Temperature 70.0 °F	
Tensile Modulus	29.6 GPa	4300 ksi	0° Direction, Wet; ASTM D638
	@Temperature 21.1 °C	@Temperature 70.0 °F	
	34.5 GPa	5000 ksi	0° Direction, Dry; ASTM D638
	@Temperature 21.1 °C	@Temperature 70.0 °F	
Flexural Strength	331 MPa	48000 psi	Dry; ASTM D790
	@Temperature 93.3 °C	@Temperature 200 °F	
	352 MPa	51000 psi	Wet; ASTM D790
	@Temperature 71.1 °C	@Temperature 160 °F	
	372 MPa	54000 psi	Dry; ASTM D790
	@Temperature 71.1 °C	@Temperature 160 °F	
	441 MPa	64000 psi	Wet; ASTM D790

Mechanical Properties	@Temperature 21.1 °C Metric	@Temperature 70.0 °F English	Comments
	455 MPa	66000 psi	Dry; ASTM D790
	@Temperature 21.1 °C	@Temperature 70.0 °F	
	503 MPa	73000 psi	Dry; ASTM D790
	@Temperature -53.9 °C	@Temperature -65.0 °F	
Flexural Modulus	23.4 GPa	3400 ksi	Dry; ASTM D790
	@Temperature 93.3 °C	@Temperature 200 °F	
	24.8 GPa	3600 ksi	Dry; ASTM D790
	@Temperature 71.1 °C	@Temperature 160 °F	
	24.8 GPa	3600 ksi	Dry; ASTM D790
	@Temperature -53.9 °C	@Temperature -65.0 °F	
	26.2 GPa	3800 ksi	Dry; ASTM D790
	@Temperature 21.1 °C	@Temperature 70.0 °F	
	26.2 GPa	3800 ksi	Wet; ASTM D790
	@Temperature 71.1 °C	@Temperature 160 °F	
	26.9 GPa	3900 ksi	Wet; ASTM D790
	@Temperature 21.1 °C	@Temperature 70.0 °F	
Compressive Strength	565 MPa	82000 psi	Dry; ASTM D695
	@Temperature 21.1 °C	@Temperature 70.0 °F	
	593 MPa	86000 psi	Wet; ASTM D695
	@Temperature 21.1 °C	@Temperature 70.0 °F	
Compressive Modulus	26.2 GPa	3800 ksi	Wet; ASTM D695
	@Temperature 21.1 °C	@Temperature 70.0 °F	
	28.3 GPa	4100 ksi	Dry; ASTM D695
	@Temperature 21.1 °C	@Temperature 70.0 °F	
Shear Strength	29.0 MPa	4200 psi	Short-Beam, Wet; ASTM D2344
	@Temperature 71.1 °C	@Temperature 160 °F	
	33.8 MPa	4900 psi	Short-Beam, Dry; ASTM D2344
	@Temperature 71.1 °C	@Temperature 160 °F	
	37.2 MPa	5400 psi	Short-Beam, Wet; ASTM D2344
	@Temperature 21.1 °C	@Temperature 70.0 °F	

Mechanical Properties	Metric	English	Comments
	78.6 MPa @Temperature -53.9 °C	5500 psi @Temperature -65.0 °F	Short-Beam, Dry, ASTM D2344
	41.4 MPa @Temperature 21.1 °C	6000 psi @Temperature 70.0 °F	Short-Beam, Dry; ASTM D2344

Thermal Properties	Metric	English	Comments
Glass Transition Temp, Tg	115 °C	239 °F	Dry; DMA

Processing Properties	Metric	English	Comments
Gel Time	5.80 min	5.80 min	
Shelf Life	12.0 Month @Temperature -17.8 °C	12.0 Month @Temperature 0.000 °F	

Descriptive Properties	Value	Comments
Fabric Area Weight (g/m <sup>2</sup> )	169.5	
Prepreg Resin Content (%)	53	
Resin Flow (%)	20	275°F, 50psi

## 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