

Park Electrochemical Nelcote® E-752 Epoxy Prepreg, IM7 Unitape Reinforced

Category : Polymer , Thermoset , Epoxy

Material Notes:

Nelcote® E-752 is a toughened, 185°C cure epoxy system designed for demanding structural applications up to 130°C. E-752 offers a good balance of toughness, high service temperature and good moisture resistance, as well as excellent tack and drape. Formulated for both oven and autoclave cure, E-752 provides for easy processing with oven cure, without sacrificing mechanical properties. Key Features and Benefits: Specifically designed to allow both oven cure and autoclave cure Allows oven curing without sacrificing mechanical properties Service temperatures up to 130°C Controlled flow for ease of processing Flexible cure temperature 132°C to 185°C Good mechanical properties can be achieved through oven curing at 132°C, followed by post-cure at 185°C Self-adhesive grade for sandwich panel applications Applications/Qualifications: Primary and Secondary Aircraft Structures Ducting Fairings Nacelles Information provided by Park Electrochemical Corp.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Park-Electrochemical-Nelcote-E-752-Epoxy-Prepreg-IM7-Unitape-Reinforced.php

Physical Properties	Metric	English	Comments
Volatiles	<= 1.9 % @Temperature 135 °C	<= 1.9 % @Temperature 275 °F	8 min

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	2340 MPa @Temperature 23.9 °C	340000 psi @Temperature 75.0 °F	0° Direction, Dry, 365° Autoclave Cured; ASTM D3039
	2410 MPa @Temperature 121 °C	350000 psi @Temperature 250 °F	0° Direction, Dry, 365° Autoclave Cured; ASTM D3039
	2450 MPa @Temperature 121 °C	356000 psi @Temperature 250 °F	0° Direction, Wet, 365° Autoclave Cured; ASTM D3039
Tensile Modulus	161 GPa @Temperature 23.9 °C	23400 ksi @Temperature 75.0 °F	0° Direction, Dry, 365° Autoclave Cured; ASTM D3039
	167 GPa @Temperature 121 °C	24200 ksi @Temperature 250 °F	0° Direction, Dry, 365° Autoclave Cured; ASTM D3039
	170 GPa @Temperature 121 °C	24600 ksi @Temperature 250 °F	0° Direction, Wet, 365° Autoclave Cured; ASTM D3039
Compressive Strength	1020 MPa @Temperature 121 °C	148000 psi @Temperature 250 °F	Wet, 365° Autoclave Cured; SACMA 1R-94
	1310 MPa	190000 psi	Dry, 365° Autoclave Cured; SACMA

Mechanical Properties	Metric @Temperature 121 °C	English @Temperature 250 °F	1R-94 Comments
	1820 MPa @Temperature 23.9 °C	264000 psi @Temperature 75.0 °F	Dry, 365° Autoclave Cured; SACMA 1R-94
Compressive Modulus	145 GPa @Temperature 23.9 °C	21100 ksi @Temperature 75.0 °F	Dry, 365° Autoclave Cured; SACMA 1R-94
	157 GPa @Temperature 121 °C	22800 ksi @Temperature 250 °F	Wet, 365° Autoclave Cured; SACMA 1R-94
	188 GPa @Temperature 121 °C	27200 ksi @Temperature 250 °F	Dry, 365° Autoclave Cured; SACMA 1R-94
Shear Modulus	4.76 GPa @Temperature 23.9 °C	690 ksi @Temperature 75.0 °F	In-Plane, Dry, 365° Autoclave Cured; ASTM D3518
Shear Strength	91.0 MPa @Temperature 23.9 °C	13200 psi @Temperature 75.0 °F	In-Plane, Dry, 365° Autoclave Cured; ASTM D3518

Thermal Properties	Metric	English	Comments
Glass Transition Temp, Tg	170 °C	338 °F	Wet; DMA
	190 °C	374 °F	Dry; DMA

Processing Properties	Metric	English	Comments
Gel Time	5.00 - 12.0 min	5.00 - 12.0 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 ²)	120-300	
Prepreg Resin Content (%)	32-38	
Resin Flow (%)	6-20	275°F, 50psi

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