Aerospace Composite Materials

Product Overview

P-600 Polyester Prepregs

Park's P-600 is a general purpose 190°F curing polyester system widely accepted as a cost-effective alternative to wet lay-up processing

Key Features & Benefits

- Meets MIL-R-7575 requirements
- 160°F max service temperature
- Good electrical properties
- Low cure temp (190°F) for easy processing

Product Forms

- Available on a variety of reinforcements
- Solution coated fabrics up to 60 inches wide
- Compatible with Autoclave, Vacuum Bag/Oven or Press Cure processes

Applications / Qualifications

- Aircraft window frames
- Industrial Parts
- Automotive applications

For Information about Park's materials:

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Technical Datasheet

P-600 Polyester Prepregs

Prepreg Physical Properties

Reinforcement	7781 E-Glass
Fabric Area Weight (gsm)	300
Prepreg Resin Content (%)	35 – 45
Resin Flow (325°F, 15 psi) (%)	8 – 13
Volatiles (275°F, 8 min) (%)	2.0 (max)

Laminate Physical / Mechanical Properties

F	Reinforcement	7781 E-Glass
Tensile Strength, 0° (Ksi)		
75°F	Dry	74.5
75°F	Wet	72.1
ASTM-D-638 Type 1		
Tensile Modulus, 0° (Msi)		
75°F	Dry	3.8
75°F	Wet	3.4
ASTM-D-638 Type 1		
Compressive Strength (Ksi)		
75°F	Dry	76.4
75°F	Wet	65.2
ASTM-D-695		
Flexural Strength (Ksi)		
75°F	Dry	111.1
75°F	Wet	86.4
ASTM-D-790		
Flexural Modulus (Msi)		
75°F	Dry	3.4
75°F	Wet	2.8
ASTM-D-790		
Dk @) 10GHz	4.3
Df @) 10GHz	0.016
Water Absorption (%) ASTM-D-570 proc. 7.5		0.38

* Wet condition: 2hr water boil

All test data provided are typical values and not intended to be specification values. For review of critical specification tolerances, please contact a Park representative directly. Park reserves the right to change these typical values as a natural process of refining our testing equipment and techniques.



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Processing Guidelines

P-600 Polyester Prepregs

Prepreg Storage Life

Out Life: 21 days @ 75°F Shelf Life: 3 months @ 40°F 6 months @ 0°F <u>Note</u>: The following guidelines are provided to assist Park material users with general recommendations for successful processing. The recommendations are for general review purposes only and process adjustments may be required to achieve optimum results in your specific manufacturing environment.

Autoclave Cure Cycle

- Apply 25" Hg vacuum (minimum) for 1 hour before beginning heat cycle
- Apply 50 psi autoclave pressure, vent vacuum at 10 psi
- Heat at 1–5 °F/min from room temperature to 190-200°F
- Cure product at 190-200°F for 90 minutes
- Cool to 150°F at no more than 10°F/min prior to releasing autoclave pressure

Vacuum/Oven Cure Cycle

- Apply 610 mmHg vacuum (minimum) for 1 hour before beginning heat cycle
- Heat at 1 5 °F/min from room temperature to 190 200°F
- Cure product at 190 200°F for 90 minutes
- Cool to 150°F at no more than 10°F/min prior to releasing autoclave pressure

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