Aerospace Composite Materials

Product Overview

P-600 Polyester Prepregs

Park's P-600 is a general purpose 88°C curing *polyester system widely accepted as a cost-effective* alternative to wet lay-up processing

Key Features & Benefits

- Meets MIL-R-7575 requirements
- 71°C max service temperature _
- Good electrical properties _
- Low cure temp (88°C) for easy processing _

Product Forms

- Available on a variety of reinforcements
- Solution coated fabrics up to 152 cm 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 (163°C, 103 kPa) (%)	8 – 13
Volatiles (135°C, 8 min) (%)	2.0 (max)

Laminate Physical / Mechanical Properties

	Reinforcement	7781 E-Glass
Tensile Strength, 0° (MPa)		
24°C	Dry	514
24°C	Wet	497
ASTM-D-63	8 Туре 1	
Tensile Modulus, 0° (Gpa)		
24°C	Dry	26.2
24°C	Wet	23.4
ASTM-D-638 Type 1		
Compressive Strength (Mpa)		
24°C	Dry	527
24°C	Wet	450
ASTM-D-69	5	
Flexural Strength (Mpa)		
24°C	Dry	766
24°C	Wet	596
ASTM-D-79	0	
Flexural Modulus (Gpa)		
24°C	Dry	23.4
24°C	Wet	19.3
ASTM-D-79		
Dk (@ 10GHz	4.3
Df (@ 10GHz	0.016
Water Absorption (%)		0.38
ASTM-D-570 proc. 7.5		0.00

* 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 @ 24°C Shelf Life: 3 months @ 4°C 6 months @ -18°C <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 635mmHg vacuum (minimum) for 1 hour before beginning heat cycle
- Apply 345 kPa autoclave pressure, vent vacuum at 103 138 kPa
- Heat at 1–3 °C/min from room temperature to 88 93°C
- Cure product at 88 93°C for 90 minutes
- Cool to 66°C at no more than 5°C/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 3 °C/min from room temperature to 88 93°C
- Cure product at 88 93°C for 90 minutes
- Cool to 66°C at no more than 5°C/min prior to releasing autoclave pressure

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