

P-670I Polyester Prepregs

Park's P-670I is a versatile, non-styrenated/low VOC polyester resin. P670I is used in a wide variety of applications including radomes, tooling and aircraft structures.

Key Features & Benefits

- Non-styrenated / low VOC resin system
- Meets requirements of MIL-R-7575C, grade B class 4
- Flame retardant formulation
- Good electrical properties at elevated temperatures
- Retains good mechanical properties after exposure to high-temperature conditioning (250°F)

Product Forms

- Available on a wide variety of reinforcements, including any MIL-C-9084 fabrics
- Solution coated fabrics up to 60 inches wide
- Compatible with Autoclave, Vacuum Bag/Oven or Press Molding processes

Prepreg Physical Properties

Reinforcement	7781 E-glass
Fabric Area Weight (gsm)	300
Prepreg Resin Content (%)	37 – 43
Volatiles (220°F, 8 min) (%)	2.0 max
Flow (275°F, 15 psi) (%)	8 – 12
Gel Time (sec)	30 – 90

Applications / Qualifications

- Radomes
- Tooling
- Aircraft Structures

For Information about Park's materials:

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Processing Guidelines

Prepreg Storage Life

- Out Life: 30 days @ 75°F
- Shelf Life: 3 months @ 40°F
- 6 months @ 0°F

Note: 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 24" Hg vacuum (minimum) for 1 hour before beginning heat cycle
- Apply 40 - 50 psi autoclave pressure, vent vacuum at 15 - 20 psi
- Heat at 2 - 5 °F/min from room temperature to 250 - 325°F
- Cure product at 250 - 325°F for 90 minutes
- Cool to 150°F at no more than 8°F/min prior to releasing autoclave pressure

Technical Datasheet

Laminate Physical Properties

Reinforcement	7781 E-glass
Hardness (Barcol)	75
Density	2.00
Flammability Method 2021	5"
Water Absorbption (%) 24hr immersion in DI H ₂ O	0.68
Dielectric Constant (Dk) @9.375 MHz	4.8
Loss Tangent @9.375 MHz	0.019

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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Laminate Physical Properties

Reinforcement	7781 E-glass
Tensile Strength, 0° (Ksi)	
75°F Dry	70
75°F Wet	60
250°F Wet	61
350°F Wet	56
ASTM-D-638 Type 1	
Tensile Modulus, 0° (Msi)	
75°F Dry	4.0
75°F Wet	3.7
250°F Wet	3.5
350°F Wet	3.3
ASTM-D-638 Type 1	
Compressive Strength (Ksi)	
75°F Dry	58
75°F Wet	54
ASTM-D-695	
Flexural Strength (Ksi)	
75°F Dry	87
75°F Wet	79
250°F Wet	57
350°F Wet	36
ASTM-D-790	
Flexural Modulus (Msi)	
75°F Dry	3.2
75°F Wet	3.4
250°F Wet	2.8
350°F Wet	2.7
ASTM-D-790	

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