

# Aerospace Composite Materials

## Product Overview

## E-722 Epoxy Prepregs

Park's E-722 is a modified 350°F cure epoxy system with excellent processing characteristics for vacuum bag, press, and autoclave molding.

### Key Features & Benefits

- Epoxy resin system optimized for use with woven aramid reinforcements
- Meets requirements of MIL-R-9300B, Type 1
- Long out-time for easy processing

### Product Forms

- Available on a wide variety of reinforcements, including Fiberglass, Quartz and Aramid (Twaron® and Kevlar®)
- Solution coated fabrics up to 60 inches wide
- Compatible with Autoclave, Vacuum Bag/Oven or Press Molding processes

### Applications / Qualifications

- Military Helicopters
- Engine Nacelles
- Work Platforms
- Doors
- Air Frames

### Qualified Specifications

- SS9612
- SS9578

### For Information about Park's materials:

Newton, KS +1.316.283.6500

info@parkaerospace.com

www.parkaerospace.com



### E-722 Epoxy Prepregs

#### Prepreg and Laminate Physical Properties

Reinforcement	7781 E-Glass	120 Aramid	285 Aramid
Prepreg Resin Content (%)	35 – 40	60-66	52 – 58
Resin Flow (325°F, 15 psi) (%)	7 – 21	28 – 45	15 – 35
Volatiles (275°F, 8 min) (% max)	2.0	3.0	3.0
Gel Time (min)	1 -2.5	1 - 6	1 – 4

#### Processing Guidelines

##### Prepreg Storage Life

Tack Life: 14 days @ 75°F  
Out Life: 30 days @ 75°F  
Shelf Life: 12 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 60 psi autoclave pressure, vent vacuum at 15 – 20 psi
- Heat at 2 – 3 °F/min from room temperature to 230 ± 10°F
- Hold temperature for 30 minutes
- Raise product temperature at 2 – 3 °F/min to 360 ± 10°F
- Hold product at cure temperature for 120 minutes
- Cool to 150°F at 8°F/min prior to releasing autoclave pressure

*All test data provided are typical values and not intended to be specification values. For review of critical specification tolerances, please contact a company representative directly.*

*Park Aerospace Corp. reserves the right to make changes without notice to any products described herein. Park does not assume any liability arising out of the application or use of any product described herein; and it does not grant any license under its patent or other rights or any such rights of others. Park also disclaims all warranties whether expressed, implied or statutory, including implied warranties of merchantability or fitness for a particular purpose.*

*Aeroglide®, ALPHA STRUT™, CoreFix®, Easycure E-710®, Electroglide®, Electrovue™, Peelcote™, Powerbond™, RadarWave™, SIGMA STRUT™ and Tin City Aircraft WorksSM are trademarks or servicemarks of Park Aerospace Corp.*



# Aerospace Composite Materials

## E-722 Epoxy Prepregs

## Technical Datasheet

### Laminate Mechanical Properties

Reinforcement	7781 E-Glass	120 Aramid	285 Aramid
<b>Tensile Strength, 0° (Ksi)</b>			
75°F Dry	54	--	81
190°F Dry	--	--	81
200°F Dry	--	--	79
190°F Wet	--	--	76
ASTM-D-638 Type 1			
<b>Tensile Modulus, 0° (Msi)</b>			
75°F Dry	3.0	--	4.4
190°F Dry	--	--	4.0
200°F Dry	--	--	3.8
190°F Wet	--	--	3.9
ASTM-D-638 Type 1			
<b>Compressive Strength (Ksi)</b>			
75°F Dry	60	--	29
190°F Dry	--	--	22
200°F Dry	--	--	22
190°F Wet	--	--	18
ASTM-D-695			
<b>Compressive Modulus (Msi)</b>			
75°F Dry	3.0	--	3.3
190°F Dry	--	--	3.1
200°F Dry	--	--	3.2
190°F Wet	--	--	3.0
ASTM-D-695			
<b>Flexural Strength (Ksi)</b>			
75°F Dry	110	52	50
190°F Dry	--	--	43
200°F Dry	--	--	40
190°F Wet	--	46	39
ASTM-D-790			
<b>Flexural Modulus (Msi)</b>			
75°F Dry	3.6	4.8	3.8
190°F Dry	--	--	3.4
200°F Dry	--	--	3.3
190°F Wet	--	3.2	3.6
ASTM-D-790			
<b>Short Beam Shear (Ksi)</b>			
75°F Dry	6.8	4.7	5.6
190°F Dry	--	--	5.5
200°F Dry	--	--	4.6
190°F Wet	--	4.4	4.3
ASTM-D-2344			

*Wet Condition: 2hr water boil immersion*

*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.*

