

L-930(GT700)

Solution Coated UD Epoxy Prepreg



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Product Data Sheet

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Description

L-930(GT700) is a flame retardant unidirectional modified epoxy prepreg with excellent mechanical properties. It is a versatile "general purpose" prepreg which can be cured over a broad range of temperatures and pressures. L-930(GT700) is also available in woven fabric up to 60" (152 cm) wide. Typical designations for woven material would be L-930-100-50" (127 cm).

Advantages of L-930(GT700)

- ❖ Thorough wetting of carbon fiber yields a product exhibiting outstanding flexural and compressive strength.
- ❖ L-930(GT700) may be used in applications with a service temperature up to 180°F (82°C).
- ❖ L-930(GT700) performs well in aerospace, sporting goods, automotive and other commercial applications.

Physical Properties on GT700 Carbon Fiber

- *Fiber Areal Weight:* 0.031 lbs/ft² (150 g/m²)
- *Standard Resin Content:* 40% by weight
- *Volatile Content:* 2% max
- *Standard Tack:* Medium
- *Cured Ply Thickness:* 0.0065-0.007" (0.165-0.178 mm)
- *Other Weights, Resin Contents, and Fabrics are Available.*

Availability

- *Up to 24" width in rolls up to 100 yards long (61 cm x 91 m)*
- *Slitting to narrow widths available*

Shelf Life

- *6 months at 40°F (4°C) or below*
- *14 days at room temperature (70°F or 21°C)*

Cure Cycles

- *60 minutes at 250-275°F (121-135°C) with 50 PSI (0.34 MPa) minimum.*
- *Vacuum bag/oven cures are acceptable for many applications.*

Typical Applications

- Interior Sandwich Panel Facings
 - Automotive and Motorcycle Components
 - Sporting Goods
 - Doublers and Stiffeners for Doors, Access Panels
 - Marine and Rail Applications
- ❖ An upgraded version of L-930(GT700) is available for slightly higher temperature performance. Called L-930HT(GT700), is qualified to a number of aerospace specifications.
- ❖ GT700 Fiber = Generic 32 MM Modulus Fiber with 700 KSI (48 GPa) Tensile Strength.

Mechanical Data

PROPERTY	LAMINATE PROPERTIES	
	100 PSI (690 MPa) CURE	TEST METHOD
ULTIMATE TENSILE (0°) STRENGTH		
Room Temperature (RT)	225 KSI (1.6 GPa)	ASTM D 3039
160°F (71°C)	200 KSI (1.4 GPa)	ASTM D 3039
TENSILE (0°) MODULUS		
Room Temperature (RT)	17.0 MSI (117 GPa)	ASTM D 3039
160°F (71°C)	17.1 MSI (118 GPa)	ASTM D 3039
COMPRESSION (0°) STRENGTH		
Room Temperature (RT)	180 KSI (1.2 GPa)	SACMA SRM IR-94
COMPRESSION (0°) MODULUS		
Room Temperature (RT)	16.1 MSI (111 GPa)	SACMA SRM IR-94
ULTIMATE FLEXURAL (0°) STRENGTH		
Room Temperature (RT)	150 KSI (1.0 GPa)	ASTM D 790
160°F (71°C)	140 KSI (966 MPa)	ASTM D 790
FLEXURAL (0°) MODULUS		
Room Temperature (RT)	15.0 MSI (103 GPa)	ASTM D 790
160°F (71°C)	15.0 MSI (103 GPa)	ASTM D 790
SHORT BEAM SHEAR (0°) STRENGTH		
Room Temperature (RT)	12 KSI (83 MPa)	ASTM D 2344
FLATWISE TENSILE STRENGTH		
Room Temperature (RT)	420 PSI (2.9 KPa)	ASTM C 297
HYDRAULIC FLUID RESISTANCE	Pass	Industry Std

NOTICE:

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