

# L-928

## Woven Phenolic Prepreg, Flame Retardant



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### Product Data Sheet

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#### Description

L-928 is a 275°F (135°C) curing phenolic prepreg with non-toxic flame retardant additives. L-928 is available on 3K Carbon Plain Weave style graphite fabric or other styles of woven fabric as requested. L-928 is intended to be used as a single ply or multiple ply skin for aramid/phenolic honeycomb or aluminum honeycomb sandwich panels.

#### Advantages of L-928

- ❖ When used with L-310FR phenolic adhesive film, L-928 prepreg facings create sandwich panels with high peel strength and high toughness.
- ❖ Processing of L-928 can be easily adapted to most heated presses or autoclaves.
- ❖ L-928 is also an excellent laminating prepreg where heat resistance is a design requirement.
- ❖ When tested per the FAA required OSU test, L-928 will allow the designer to create structures which will meet or exceed these stringent requirements.

#### Physical Properties on 3K Carbon Plain Weave

- *Standard Weight:* 0.069 lbs/ft<sup>2</sup> (337 g/m<sup>2</sup>)
- *Standard Resin Content:* 42% by weight
- *Volatile Content:* 4-6%
- *Standard Tack:* Low tack
- *Cured Ply Thickness:* 0.008" (0.203 mm)
- *Other Weights, Resin Contents, and Fabrics are Available.*

#### Availability

- *Standard: 50" wide x 60 yards long (127 cm x 55 m), or*
- *Up to 60" width in rolls up to 100 yards long (152 cm x 91 m)*

#### 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 275°F (135°C), or*
- *120 minutes at 260°F (127°C).*



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## Flammability

- *Self Extinguishing per FAR part 25.853*

## Sandwich Properties\*

Core: 1/8" – 3 lbs/ft<sup>3</sup> (3.30 mm – 48 kg/m<sup>3</sup>) Aramid/Phenolic Honeycomb

Adhesive: 1 ply L-310FR each side

Facings: 2 plies L-928-100 (3K Carbon Plain Weave) each side

- *RT Flatwise Tensile Strength: 240 PSI (1.7 MPa)*
- *RT Sandwich Peel Strength: 9 in lb/in (40 Nm/m)*

❖ L-928-100 (3K Carbon Plain Weave) sandwich peel strength ranges from 7-13 in lb/in (31-58 Nm/m).

## Mechanical Data

PROPERTY	LAMINATE PROPERTIES	
	45 PSI (0.31 MPa) CURE	TEST METHOD
<b>ULTIMATE TENSILE STRENGTH</b>		
Room Temperature (RT)	91 KSI (628 MPa)	ASTM D638
160°F (71°C)	88 KSI (607 MPa)	ASTM D638
RT(WET)	82 KSI (566 MPa)	ASTM D638
<b>TENSILE MODULUS</b>		
Room Temperature (RT)	9.9 MSI (68 GPa)	ASTM D638
160°F (71°C)	9.1 MSI (63 GPa)	ASTM D638
RT(WET)	9.6 MSI (66 GPa)	ASTM D638
<b>ULTIMATE COMPRESSION STRENGTH</b>		
Room Temperature (RT)	73 KSI (503 MPa)	ASTM D695
160°F (71°C)	62 KSI (428 MPa)	ASTM D695
RT(WET)	58 KSI (400 MPa)	ASTM D695
<b>COMPRESSION MODULUS</b>		
Room Temperature (RT)	8.5 MSI (59 GPa)	ASTM D695
160°F (71°C)	8.4 MSI (58 GPa)	ASTM D695
RT(WET)	8.4 MSI (58 GPa)	ASTM D695
<b>ULTIMATE FLEXURAL STRENGTH</b>		
Room Temperature (RT)	123 KSI (848 MPa)	ASTM D790
160°F (71°C)	119 KSI (821 MPa)	ASTM D790
<b>FLEXURAL MODULUS</b>		
Room Temperature (RT)	9.2 MSI (63 GPa)	ASTM D790
160°F (71°C)	9.0 MSI (62 GPa)	ASTM D790

### NOTICE:

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