

L-728

Woven Phenolic Prepreg



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Product Data Sheet

Description

L-728 is a modified phenolic prepreg with excellent fire, smoke and toxicity properties. L-728 is the result of development aimed at creating a new generation of aircraft interior prepregs. L-728 is intended to be used as a single ply or multiple ply skin for aramid/phenolic honeycomb sandwich panels or in laminates.

Advantages of L-728

- ❖ When used with L-310FR phenolic adhesive film, L-728 prepreg facings create sandwich panels with high peel strength and high toughness.
- ❖ Processing of L-728 can be easily adapted to most heated presses or autoclaves.
- ❖ L-728 is also an excellent laminating prepreg for air conditioning ducts and other interior laminate applications.
- ❖ L-728 will allow the designer to create complex structure which meets stringent FAA requirements.

Physical Properties on 285 Style Aramid Fabric

- *Standard Weight:* 0.070 lbs/ft² (342 g/m²)
- *Standard Resin Content:* 50% by weight
- *Volatile Content:* 8-14%
- *Standard Tack:* Medium tack
- *Cured Ply Thickness:* 0.010" (0.254 mm)
- *Other Weights, Resin Contents, and Fabrics are Available.*

Availability

- *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).*

Flammability

- *Self Extinguishing per FAR part 25.853*

Sandwich Properties*

Core: ¼" cell x 0.004" (6.35 mm cell x 0.10 mm) Aluminum Foil

Adhesive: 1 ply L-310FR each side

Facings: 2 plies L-728-285K each side

- *RT Flatwise Tensile Strength:* 900 PSI (6.2 MPa)
- *RT Sandwich Peel Strength:* 8 in lb/in (36 N/25 mm)

*Sandwich peel strength varies with the orientation of fibers directly against the core and test direction.

- ❖ Fibers laid up parallel with the test direction produce minimum strengths.
- ❖ Fibers laid up perpendicular to the test direction produce maximum strengths.
- ❖ L-728-285K sandwich peel strength ranges from 5-10 in lb/in (22-44 N/25 mm).

Mechanical Data

PROPERTY	LAMINATE PROPERTIES		
	L-728-285K	L-728-220K	TEST METHOD
ULTIMATE TENSILE STRENGTH			
Room Temperature (RT)	69 KSI (476 MPa)	60 KSI (414 MPa)	ASTM D638
160°F (71°C)	61 KSI (421 MPa)	51 KSI (352 MPa)	ASTM D638
RT(WET)	60 KSI (414 MPa)	51 KSI (352 MPa)	ASTM D638
TENSILE MODULUS			
Room Temperature (RT)	9.6 MSI (66 GPa)	7.8 MSI (54 GPa)	ASTM D638
160°F (71°C)	9.1 MSI (63 GPa)	7.2 MSI (50 GPa)	ASTM D638
RT(WET)	8.2 MSI (57 GPa)	6.8 MSI (47 GPa)	ASTM D638
ULTIMATE COMPRESSION STRENGTH			
Room Temperature (RT)	19 KSI (131 MPa)	16 KSI (110 MPa)	ASTM D695
160°F (71°C)	16 KSI (110 MPa)	15 KSI (103 MPa)	ASTM D695
RT(WET)	14 KSI (97 MPa)	14 KSI (97 MPa)	ASTM D695
COMPRESSION MODULUS			
Room Temperature (RT)	10.6 MSI (73 GPa)	7.8 MSI (54 GPa)	ASTM D695
160°F (71°C)	7.9 MSI (54 GPa)	6.7 MSI (43 GPa)	ASTM D695
RT(WET)	6.8 MSI (47 GPa)	5.5 MSI (38 GPa)	ASTM D695
ULTIMATE FLEXURAL STRENGTH			
Room Temperature (RT)	34 KSI (234 MPa)	25 KSI (172 MPa)	ASTM D790
160°F (71°C)	23 KSI (159 MPa)	14 KSI (97 MPa)	ASTM D790
FLEXURAL MODULUS			
Room Temperature (RT)	3.1 MSI (21 GPa)	3.0 MSI (21 GPa)	ASTM D790
160°F (71°C)	2.7 MSI (19 GPa)	2.5 MSI (17 GPa)	ASTM D790

NOTICE:

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