



PRODUCT DATA SHEET

LC-E321

250° Curing Flame

Retardant Epoxy Glass Prepreg

Description

LC-E321 is a single or two side coated, 250°F (121°C) flame retardant epoxy glass prepreg designed for a multitude of sandwich panel construction(s) as well as multiple ply laminates. This system can be used in a low tack version (press applications) or high tack and drape for complex contours and shapes.

Advantages

LC-E321 can be layered up using various core materials e.g. phenolic, aluminum, PVC foam without the use of additional film adhesives. Excellent strength and toughness allow for LC-E321 to perform well in a variety of finished part shapes and sizes. Low volatiles have also proven ideal for low void, multiple ply lay ups. A wide variety of cure cycles, cure temperatures and pressure also allow for LC-E321 to be very user friendly throughout processing.

Physical Properties

Density: 1.2 G/cm³ per ASTM D792

Gel Time @ 275°F (135°C): 4 -7 minutes

Tg: 218°F (103°C)

Color: Cream

Tack: Low -Medium

Shelf Life/Out Life/Storage

Shelf Life: 6 months from Certification Date

Out Life: 14 days @ 70°F (21°C)

Storage Temp: 40° F or below

Processing/Cure Cycle Recommendations

LC-E321 can be processed at temperatures from 235°F (113°C.) for 90 minutes to 290°F (143°C.) for 40 minutes. A 250°F (121°C) cure for 60 minutes is optimal in most cases using press, vacuum bag or autoclave processing.

Mechanical Properties				
Property	Tested per Specification	R.T. (75 °F)	R.T. Wet	160 °F
Ultimate Tensile Strength (psi)	FTMS 406	63,100	54,025	49,400
Tensile Modulus (psi x 10E6)	FTMS 406	3.7	N/A	3.5
Ultimate Compression Strength (psi)	FTMS 406	60,300	52,500	48,800
Compression Modulus (psi x 10E6)	FTMS 406	3.6	3.5	3.5
Ultimate Flexural Strength (psi)	FTMS 406	86,200	N/A	63,500
Flexural Modulus (psi x 10E6)	FTMS 406	3.6	N/A	3.3
Interlaminar Shear (psi)	FTMS 406	6100	N/A	N/A

*Tests performed using LC-E321-7781 @ 40% RC, press cured @ at 250°F (121°C), 25 psi pressure using ½" thick, 1/8" cell, 3# Nomex™ honeycomb core.

**Additional fabric styles available upon request

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