



PRODUCT DATA SHEET

LC-E320

250° Curing Epoxy Glass Prepreg

Description

LC-E320 is a single or two side coated, 250°F (121°C) 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-E320 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-E320 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-E320 to be very user friendly throughout processing.

Physical Properties

Density: 1.2 G/cm³ per ASTM D792
Gel Time @ 275°F (135°C): 4 -6 minutes
Tg: 218°F (103°C)
Color: Cream
Tack: 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-E320 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	58,200	51,350	49,100
Tensile Modulus (psi x 10E6)	FTMS 406	3.7	3.5	3.5
Ultimate Compression Strength (psi)	FTMS 406	60,000	52,150	49,600
Compression Modulus (psi x 10E6)	FTMS 406	3.6	3.5	3.5
Ultimate Flexural Strength (psi)	FTMS 406	86,000	N/A	60,200
Flexural Modulus (psi x 10E6)	FTMS 406	3.6	N/A	3.3
Interlaminar Shear (psi)	FTMS 406	5,900	N/A	N/A

*Tests performed using LC-E320-7781 @ 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

LincolnCompositeMaterials.com

(714) 898-8350

Sales@LCMaterials.com

15422 Electronic Lane

Huntington Beach, CA 92649

Seller cannot anticipate all conditions under which seller's products, or the products of other manufacturers in combination with seller's products, may be used. Seller accepts no responsibility for results obtained by the application of seller's products or the safety and suitability of seller's products, either alone or in combination with other products. Users are advised to conduct their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, seller delivers the products without warranty of any nature, stated or implied, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of said products, whether used alone or in combination with other products. Purchaser waives any claim against seller for direct, indirect, consequential or exemplary damages against seller, including without limitation, damage which may incur as a result of purchaser's use or misuse of the product or the product's failure to conform to any particular specification.