



PRODUCT DATA SHEET

LC-E433

175° Curing

Clear Epoxy Carbon Prepreg

Description

LC-E433 is a single or two side coated, 175°F (79°C) clear epoxy carbon prepreg designed for low temperature curing with optical clarity within the finished parts. LC-E4333 can be applied to various fabrics where aesthetics are required. LC-E433 is available in a medium-high tack to accommodate detailed contour and shapes.

Advantages

LC-E433 remains optically clear throughout processing allowing the finished parts to reflect the substrate below. LC-E433 can be produced in various weights and thicknesses both unsupported and supported with a fabric of choice. A wide variety of cure cycles and cure temperatures also allow for LC-E433 to be very user friendly throughout processing.

Physical Properties

Density: 1.2 G/cm³ per ASTM D792
Gel Time @ 275°F (135°C): 2-4 minutes
Tg: 205°F (102°C)
Color: Clear
Tack: High

Shelf Life/Out Life/Storage

Shelf Life: 4 months from Certification Date
Out Life: 6 days @ 70°F (21°C)
Storage Temp: 40° F or below

Processing/Cure Cycle Recommendations

LC-E433 can be processed at temperatures from 175°F (79°C.) for 360 minutes to 250°F (121°C.) for 60 minutes. A 175°F (79°C) cure for 360 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	59,500	51,000	47,400
Tensile Modulus (PSI x 10E6)	FTMS 406	3.7	3.5	3.5
Ultimate Compression Strength (psi)	FTMS 406	62,600	53,100	49,500
Compression Modulus (PSI x 10E6)	FTMS 406	3.6	3.5	3.5
Ultimate Flexural Strength (psi)	FTMS 406	89,500	N/A	63,000
Flexural Modulus (PSI x 10E6)	FTMS 406	3.5	N/A	3.2
Horizontal Shear (psi)	FTMS 406	6,200	N/A	N/A

*Tests performed using 2 plies LC-E433-C100 @ 43% RC, press cured @ at 250° F (121° C), 25 psi pressure using ½” thick, 1/8” cell, 3# Nomex™ honeycomb core.

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