



PRODUCT DATA SHEET

LC-E321QC

250° Quick Cure Flame

Retardant Epoxy Glass Prepreg

Description

LC-E321QC is a single or two side coated, 250°F (121°C) quick cure 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-E321QC can be cured within 20 minutes at 275° (135° C). It can also be layed 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-E321QC 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-E321QC to be very user friendly throughout processing.

Physical Properties

Density: 1.2 G/cm³ per ASTM D792
Gel Time @ 275°F (135°C): 2-5 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-E321QC can be processed at temperatures from 235°F (113°C.) for 60 minutes to 290°F (143°C.) for 20 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 | 61,100 | 52,000 | 47,300 |
| Tensile Modulus (psi x 10E6) | FTMS 406 | 3.6 | N/A | 3.4 |
| Ultimate Compression Strength (psi) | FTMS 406 | 59,300 | 50,500 | 47,700 |
| Compression Modulus (psi x 10E6) | FTMS 406 | 3.6 | 3.5 | 3.5 |
| Ultimate Flexural Strength (psi) | FTMS 406 | 84,100 | N/A | 62,200 |
| Flexural Modulus (psi x 10E6) | FTMS 406 | 3.6 | N/A | 3.3 |
| Interlaminar Shear (psi) | FTMS 406 | 5900 | N/A | N/A |

*Tests performed using LC-E321QC-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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