



**Description**

LC-E521 is a single or two side coated, 250°F (121°C) flame retardant epoxy aramid 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-E521 can be layered up using various core materials e.g. phenolic, aluminum, PVC foam without the use of additional film adhesives. Excellent impact and toughness allow for LC-E521 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-E521 to be very user friendly throughout processing.

**Physical Properties**

Density: 1.24 G/cm<sup>3</sup> 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-E521 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 with.

Mechanical Properties				
Property	Tested per Specification	R.T. (75 °F)	R.T. Wet	160 °F
Ultimate Tensile Strength (psi)	FTMS 406	61,100	56,200	56,400
Tensile Modulus (psi x 10E6)	FTMS 406	3.5	N/A	3.2
Ultimate Compression Strength (psi)	FTMS 406	22,600	17,600	16,500
Compression Modulus (psi x 10E6)	FTMS 406	3.1	N/A	3.0
Ultimate Flexural Strength (psi)	FTMS 406	54,700	N/A	41,600
Flexural Modulus (psi x 10E6)	FTMS 406	3.2	N/A	N/A
Interlaminar Shear (psi)	FTMS 406	2100	N/A	N/A
Sandwich Peel Strength(in lbs/in)	FTMS 406	8	N/A	N/A
Flatwise Tensile Strength (psi)	FTMS 406	900	N/A	N/A

\*Tests performed using LC-E521-A205(281) @ 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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