



PRODUCT DATA SHEET

LC-E345T

Variable Temperature Cure
Epoxy Tooling Prepreg

Description

LC-E345T is a two-side coated, glass epoxy tooling prepreg designed to provide a high-quality tool surface from a low temperature master mold. LC-E345T is ideal for both 250 °F (121 °C) and 350 °F (177 °C) tooling applications following post cure.

Advantages

LC-E345T has excellent tack and drape for ease of layup within complex shapes. Low cost master molds can be utilized with the initial cure of 150 °F (65 °C) followed by various post cure options depending on service temperature requirements. LC-E345T is suitable for producing small to large tools.

Physical Properties

Density: 1.23 G/cm³ per ASTM D792
Gel Time @ 250 °F (121 °C): 6-9 minutes
Color: Black
Tack: High

Shelf Life/Out Life/Storage

Shelf Life: 6 months from certification date
Out Life: 14 days @ 70 °F (21 °C)
Storage Temp: 0 °F (-18 °C)

Recommended Cure Cycles

10 hours @ 150 °F (65 °C)
3 hours @ 175 °F (79 °C)
90 minutes @ 250 °F (121 °C)

Recommended Post Cure Cycle

1 hour @ 250 °F (121 °C)
1 hour @ 325 °F (162 °C)
8 hours @ 400 °F (204 °C)

Processing/Cure Cycle Recommendations

LC-E345T can be processed at temperatures from 150 °F (65 °C) up to 400 °F (204 °C). The above recommended post cure will provide optimum T_g of 384 °F (195 °C).

*Please contact LCM Technical Dept. for further post cure options.

Mechanical Properties				
Property	Tested per Specification	R.T. (75 °F)	R.T. Wet	350 °F
Ultimate Tensile Strength (psi)	ASTM D3039	61,000	N/A	55,000
Tensile Modulus (PSI x 10E6)	ASTM D3039	3.2	N/A	3.3
Ultimate Compression Strength (psi)	ASTM D695	71,600	N/A	42,000
Compression Modulus (PSI x 10E6)	ASTM D695	3.9	N/A	3.3
Ultimate Flexural Strength (psi)	ASTM D790	93,000	N/A	74,400
Flexural Modulus (PSI x 10E6)	ASTM D790	3.5	N/A	3.4

*RT (75 °F) Tests performed using 12 plies of LC-E345T-C101 @ 39% RC, press cured @ 175 °F (79 °C) for 3 hours followed by 2 hours @ 250 °F (121 °C).

*350 °F Tests performed using 12 plies of LC-E345T-C101 @ 39% RC, press cured @ 175 °F (79 °C) for 3 hours followed by 90 minutes @ 250 °F (121 °C) and 8 hours @ 400 °F (204 °C).

LincolnCompositeMaterials.com

(714) 898-8350

Sales@LCMaterials.com

15422 Electronic Lane

Huntington Beach, CA 92649

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