



PRODUCT DATA SHEET

LC-E221

250 Degree Curing Flame
Retardant Epoxy Film Adhesive

Description

LC-E221 is a 250F (121C) flame retardant epoxy film adhesive specifically designed for bonding metal to metal or metal to various core materials.

Advantages

LC-E221 demonstrates excellent adhesion and toughness throughout various cure cycles using both press and vacuum bag curing. LC-E221 exhibits excellent resistant's to humidity as well as a variety of test fluids. LC-E221 can also be supplied both supported and unsupported in multiple weight and thicknesses.

Physical Properties

Density: 1.2 G/cm³ per ASTM D792
Gel Time @ 275°F (135°C): 4 -6 minutes
Glass Transition Temperature (T_g): 230°F (110°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: 6 months @ 40° F or below

Processing/Cure Cycle Recommendations

LC-E221 can be processed at temperatures from 235°F. (113°C.) for 90 minutes to 290°F. (143°C.) for 40 minutes, using low, medium or high pressure. A 250°F (121°C) cure for 60 minutes is optimal in most cases using press, vacuum bag or autoclave processing with 25 psi pressure.

Mechanical Properties				
Property	Tested per Specification	-67 °F	R.T. (75 °F)	180 °F
Tensile Shear (psi)	MMM-A-132	3875	4650	3520
Sandwich Peel Strength (inch lbs. / 1" width)	Mil-A-25463	11.2	15.1	15.3
Flatwise Tension (psi)	Mil-A-25463	1020	1265	890
Flexural Strength (lbs)	Mil-A-25463	2110	2405	1980

*Tests performed using LC-E221M (supported) .060 psf, press cured @ at 250° F, 25 psi pressure.

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.

REV 160818