



PRODUCT DATA SHEET

LC-E224

175 Degree Curing Flame Retardant Epoxy Film Adhesive

Description

LC-E224 is a 175°F (79°C) curing toughened, high peel, flame retardant epoxy film adhesive specifically designed for bonding structural materials, metals, composites, etc. to various core materials while maintaining excellent peel strength.

Advantages

LC-E224 demonstrates excellent adhesion and toughness using press, vacuum bag or autoclave processing. The wide range of cure cycles allows LC-E224 to exhibit higher elongation thus increased compatibility with numerous composite materials. This system also allows the user to manufacture parts while using lower cost tooling due to the lower temperature cure. LC-E224 can also be supplied both supported and unsupported in multiple weights and thicknesses.

Physical Properties

Density: 1.2 G/cm³ per ASTM D792
Gel Time @ 250°F (121°C): 3-5 minutes
Glass Transition Temperature (T_g): 205°F (102°C)
Color: Cream
Tack: Medium

Shelf Life/Out Life/Storage

Shelf Life: 6 months from Certification Date
Out Life: 5 days @ 70°F (21°C)
Storage Temp: 40°F (18°C) or below

Processing/Cure Cycle Recommendations

LC-E224 can be processed at temperatures from 175°F. (79°C.) for 360 minutes to 250°F. (121°C.) for 60 minutes using low, medium or high pressure. Using a 175°F (79°C) cure for 360 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	5050	5110	3025
Sandwich Peel Strength (inch lbs. / 1" width)	Mil-A-25463	8.8	15.1	14.3
Flatwise Tension (psi)	Mil-A-25463	1120	1190	860
Flexural Strength (lbs)	Mil-A-25463	2110	2320	1880

*Tests performed using LC-E224M (supported) .060 psf, press cured @ at 250° F, 25 psi pressure.

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