



PRODUCT DATA SHEET

LC-E224

175° 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 @ 275°F (135°C): 2-4 minutes
Tg: 205°F (102°C)
Color: Cream
Tack: Medium

Shelf Life/Out Life/Storage

Shelf Life: 4 months from Certification Date
Out Life: 6 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 a 175°F (79°C) cure for 360 minutes is optimal in most cases using press, vacuum bag or autoclave processing.

Mechanical Properties				
Property	Tested per Specification	-67 °F	R.T. (75 °F)	180 °F
Tensile Shear (psi)	MMM-A-132	5000	5100	3000
Sandwich Peel Strength (inch lbs. / 1" width)	Mil-A-25463	8.8	15.1	14.3
Flatwise Tension (psi)	Mil-A-25463	1100	1200	800
Flexural Strength (lbs)	Mil-A-25463	2100	2300	1900

*Tests performed using LC-E224M (supported) .060 psf, press cured @ at 250°F (121°C.), 25 psi pressure.

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