



PRODUCT DATA SHEET

LC-E222

250 Degree Curing Flame Retardant
Toughened Epoxy Film Adhesive

Description

LC-E222 is a 250°F (121°C) 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-E222 demonstrates excellent adhesion and toughness throughout various cure cycles using both press and vacuum bag curing. The chemistry surrounding LC-E222 allows for higher elongation thus increased compatibility with numerous composite materials. LC-E222 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): 218°F (103°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-E222 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	5220	4850	3250
Tensile Shear (psi) After Exposure 30 days @ 120° F, 95% RH	MMM-A-132	N/A	4650	N/A
Tensile Shear (psi) After Exposure 7 days in Hydraulic Fluid	MMM-A-132	N/A	4800	N/A
Tensile Shear (psi) After Exposure 7 days in JP4 Fuel	MMM-A-132	N/A	5125	N/A
Creep Rupture (psi)	MMM-A-132	N/A	Pass	Pass
T-Peel Lbs/inch width	MMM-A-132	N/A	21	N/A

*Tests performed using LC-E222M (supported) .060 psf, press cured @ at 250° F, 25 psi pressure.

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