



# PRODUCT DATA SHEET

LC-E223

250 Degree Curing

Clear Toughened Epoxy Film Adhesive

### Description

LC-E223 is a 250°F (121°C) toughened, clear epoxy film adhesive specifically designed for optical clarity within the finished parts. LC-E223 can be applied to various fabrics where aesthetics are required. LC-E223 is available in low, medium and high tack versions to accommodate flat panel constructions as well as high contour shapes.

### Advantages

LC-E223 remains optically clear throughout processing allowing the finished parts to reflect the substrate below. LC-E223 can be produced in various weights and thicknesses both unsupported and supported with a fabric of choice.

### Physical Properties

Density: 1.2 G/cm<sup>3</sup> per ASTM D792  
Gel Time @ 275°F (135°C): 4-6 minutes  
Glass Transition Temperature (T<sub>g</sub>): 210°F (99°C)  
Color: Clear  
Tack: Low, Medium, High

### Shelf Life/Out Life/Storage

Shelf Life: 6 months from Certification Date  
Out Life: 14 days @ 70°F (21°C)  
Storage Temp: 40° F or below

### Processing/Cure Cycle Recommendations

LC-E223 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	N/A	4500	N/A
Sandwich Peel Strength (inch lbs. / 1" width)	Mil-A-25463	N/A	13.6	N/A
Flatwise Tension (psi)	Mil-A-25463	N/A	1250	N/A
Flexural Strength (lbs)	Mil-A-25463	N/A	2550	N/A

\*Tests performed using LC-E223M (supported) .060 psf, press cured @ at 250° F, 25 psi pressure.

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