



TECHNICAL BULLETIN

EB-135

MEDIUM VISCOSITY CLEAR EPOXY ADHESIVE

EB-135 is a clear epoxy adhesive designed for electronic, optical, medical, and general applications and for casting of small electrical components. This epoxy system has 2 to 1 mixing ratio by volume & cure fast at moderate temperature. The cured adhesive gives high impact and bond strength. It can be used for bonding glass, metals, woods and some plastics.

Features & Applications:

- Field Assembly: mix and cure in the field.
- Optics: active alignment of optics such as lenses, prisms, diodes, filters, etc. to opto-circuit
- Fiber Optics: “field curing” or field assembly of connectors and couplers; also suggested for fiber optic splicing.
- Medical: adhesion to most metals, plastics, ceramics, and glasses found in tubing, substrates or housing.
- General: arts and crafts repair, restoration, and hobbyists.

TYPICAL HANDLING PROPERTIES:

Adhesive	PART-A
Hardener	PART-B
Mix ratio by weight, (Resin/Hardener)	100/46
Mix ratio by volume, (Resin/Hardener)	100/50
Mixed Viscosity at 25°C, cp	4,000-7,000
Pot Life at 25°C (100 grams), minutes	30

Recommended Cure **3 hours @ 65°C**

Alternate Cure: **24 hours @ 25°C**

TYPICAL CURED PROPERTIES:

Color	Clear
Specific Gravity	1.1
Hardness, Shore D	86
Lap Shear Strength to Aluminum, psi	
At -55°C	2300
At 25°C	3100
At 95°C	150
Die Shear Strength, psi	1800
Refractive Index	1.54
Service Temperature range, °C	-55 to 125
Glass Transition Temperature, °C	72
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ /°C	
Below Tg	62
Above Tg	>200
Dielectric Strength, volts/mil	600
Dielectric Constant, 1 kHz	3.2
Dissipation Factor, 1 kHz	0.02
Volume Resistivity, ohm-cm	1x10 ¹³

INSTRUCTIONS FOR USE:

1. Mix Resin: Hardener – 100:46 grams by weight or 2:1 by volume and vacuum degas.
2. Cure as recommended achieving the desired properties.
3. Typical cured properties were determined using recommended cure schedule.
4. Some difference in properties may occur with the alternate or other cure schedules.

AVAILABILITY:

Packaged in Pint, Quart, Gallon, and 5-Gallon kit size.

Also available in 50cc dual syringe cartridge

FOR INDUSTRIAL USE ONLY: Practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

WARNING! Adequate ventilation of work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to Material Safety Data Sheet (**MSDS**) for additional health and safety information.

SHELF LIFE: one year when stored in unopened containers at an average temperature of 25°C.

DISCLAIMER: All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.