



ISO-9001-2015 Certified

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# TECHNICAL BULLETIN

## EPOXIBOND™ EB-135 LOW VISCOSITY 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	1.5482
Service Temperature range, °C	-55 to 125
Glass Transition Temperature, °C	72
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> /°C	
Below Tg	62
Above Tg	>200
Dielectric Strength, volts/mil	508
Dielectric Constant, 1 kHz	3.2
Dissipation Factor, 1 kHz	0.02
Volume Resistivity, ohm-cm	1x10 <sup>13</sup>

### INSTRUCTIONS FOR USE:

To use simply insert the cartridge into the application gun and start the plunger into the cylinders using light pressure on the trigger. Next, remove the cartridge cap and expel a small amount of adhesive to be sure both sides are flowing evenly and freely. If automatic mixing of resin and hardener is desired, attach the mixing nozzle to the end of the cartridge and begin dispensing the adhesive. For hand mixing, expel the desired amount of the adhesive and mix thoroughly. Mix approximately 15 seconds after uniform color is obtained.

### FOR INDUSTRIAL USE ONLY:

These materials are intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

### WARNING!

Adequate ventilation of workplace and ovens is essential. 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 for additional health and safety information.

### STORAGE & SHELF LIFE:

Product shall be ideally stored in a dry location in unopened containers at a temperature between 20°C to 28°C unless otherwise labeled. The shelf life of these materials is 12 months 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.