



TECHNICAL BULLETIN

EB-130M-1 HIGH IMPACT, LOW VISCOSITY EPOXY

EB-130M-1 is an unfilled, low viscosity clear epoxy system that exhibits exceptional resistance to impact and thermal shock. Applications includes, high bond strength adhesive for most similar and dissimilar substrates; for making in-place laminates or for protective coating on metals etc. Also it can be used for semi-rigid, moisture proof, gas tight seals between plastic and metallic or other substrates. This is also recommended for potting devices such as connector shells from which rigid or flexible wires may protrude directly through the epoxy.

USP Class VI Certified for Biocompatibility

TYPICAL HANDLING PROPERTIES:

Epoxybond	Part A
Hardener	Part B
Mix ratio by weight, (Adhesive/Hardener)	100/25
Mixed Viscosity at 25°C, cp	500-800
Pot Life at 25°C (100 grams), minutes	30-40

Recommended Cure	3 hr @ 65°C
Alternate Cure	24-48hr @25°C

TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE:

(Tested @ 25°C unless otherwise indicated)

Color	Clear
Specific Gravity	1.16
Hardness, Shore D	85
Water Absorption (24 hr @ 25°C), %	0.17
Lap Shear Strength to AL, psi	>3000
Linear Shrinkage, %	0.27
Flexural Strength (yield), psi	13,500
Flexural Modulus (yield), psi	3.2x10 ⁵
Service Temperature range, °C	
Continuous	-55 to 120
Intermittent	-55 to 200
Glass Transition Temperature, °C	80
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ /°C	
Below Tg	59
Dielectric Strength, Volts/mil	450
Dielectric Constant at 1 kHz	4.14
Dissipation Factor at 1 kHz	0.012
Volume Resistivity, ohm-cm	8x10 ¹⁴

OPTICAL PROPERTIES:

Refractive Index, 25°C (uncured)	1.52 @ 589nm
Spectral Transmission, 380-980nm	99%

INSTRUCTIONS FOR USE:

1. To use, mix at room temperature, 100 grams of Part A with 25 grams of Part B and vacuum degas.
2. Do not mix more than 200 grams mass due to violent exothermic reaction with evolution of fumes and smoke.
3. Apply to clean bonding surfaces and cure as recommended to achieve the desired properties.
4. Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

FROZEN ADHESIVE:

Thaw premixed frozen adhesive at room temperature for 5-10 minutes. Dispense adhesive and cure at recommended schedules.

AVAILABILITY:

2 parts Kit - Packaged in Pint, Quart, Gallon, and 5-Gallon size.

Premixed and frozen - Packaged in 3cc, 5cc, 10cc and 30cc disposable syringes and ship in dry ice at -80°C.

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.