



ISO-9001-2015 Certified

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TECHNICAL BULLETIN

EPOXIOHM™ EO-97M ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE

EO-97M is one part, silver filled, high electrical conductivity, epoxy adhesive for die attach, semiconductor and other microelectronics applications. It provides for fine pitch resolution, when syringe dispensed, stencil printed, or screen-printed. This system features excellent thermal stability, outstanding chemical resistance and excellent high temperature properties.

Applications include adhesives; die attachment, printed circuit board fabrication, advanced material composites, sealing and high-performance coatings. It provides excellent adhesion to many substrates, as well as tin/lead solder terminated components.

Features and Benefits:

- Fast Cure at 150 and 175°C
- Low Stress
- Excellent Dispensability
- Outstanding Pot Life and Open Time
- Room Temperature Stable

TYPICAL UNCURED PROPERTIES		TYPICAL CURED PROPERTIES	
Minimum Bond line Cure Schedule:		1-2 minutes @ 175°C <5 minutes @ 160°C 5-10 minutes @ 150°C 30-45 minutes @ 125°C	
Appearance	Silver	Hardness	D - 89
Die Shear Strength, kg-f (2x2mm Au Die)	19	Lap Shear Strength (aluminum to aluminum)	1300 psi
Viscosity @ 25°C CP-51 spindle @ 5 rpm	8,000 – 12,000 cp	Thermal Conductivity	2.0 w/m°K
Thixotropic Index (0.5 rpm/5 rpm)	3.4	Glass Transition Temperature	82°C
Pot Life @ 25°C	>20 days	Coefficient of Thermal Expansion Below Tg Above Tg	56 ppm/°C 175 ppm/°C
Shelf Life @ 20°C or below @ 0°C or below @ -40°C or below	1 Month 3 months 1 Year	Volume Resistivity @ 25°C after 1 hr @ 150°C after 100 hrs @ 150°C	0.0002 ohm-cm 0.0004 ohm-cm
Particle Size	<10 micron	Extractable Ionic Impurities: Cl- Na+ K+	<20 ppm <10 ppm <5 ppm



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Storage & Use:

Frozen storage at below 0°C is recommended. Allow material to be warmed to room temperature before use on dispensing equipment.

Shelf Life:

1. 1 month @ below 20°C
2. 3 months @ below 0°C
3. 12 months @ below -40°C

For Industrial Use only:

Practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

Warning:

Adequate ventilation of workplace 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.

Availability:

Packaged in 3cc, 5cc, 10cc, 30cc disposable syringes and 1 lb. container

Shipping and Unpacking Procedure:

This material may require packaging in dry ice to protect it from thermal excursions during shipment. The substantially engineered system of an insulated container, packing material and the dry ice is designed to protect the material for up to 6 days in transit (international) and up to 48 hours in transit (domestic). It is critical that the shipping container is not opened in transit and that the shipment be expedited during transit to its destination.

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.