



TECHNICAL BULLETIN

EPOXIOHM EO-97M ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE

EO-97M is a room temperature storable one part, silver filled, high electrical conductivity epoxy adhesive. It is designed for microelectronics applications. It is very smooth, flowable thixotropic paste capable of application by automatic dispenser, die stamping, screen printing, stencil or hand probe. It requires heat cure to obtain optimal properties.

TYPICAL HANDLING PROPERTIES:

| | |
|--|---------------------|
| Consistency | Smooth paste |
| Viscosity @ 25°C, cps (Cone plate, spindle#51, 5 rpm) | 9,000 – 12,000 |
| Shelf life @ 0°C | 3 months |
| @ <20°C | 1 month |
| Recommended Cure: (Bondline curing Temperature) | |
| | 1-2 minutes @ 175°C |
| | 5 minutes @ 150°C |
| Or | 30 minutes @ 125°C |
| Or | 1 hr @ 100°C |

TYPICAL CURED PROPERTIES:

(Tested at 25°C unless otherwise indicated)

| | |
|--|------------|
| Color | Silver |
| Specific Gravity | 3.2 |
| Hardness, Shore D | 89 |
| Lap Shear Strength to Aluminum, psi | 1300 |
| Volume Resistivity, ohm-cm | 0.0002 |
| After 100 hrs @ 150°C | 0.0004 |
| After 1000 hrs @ 150°C | 0.0008 |
| Thermal Conductivity, W/mK | 2.0 |
| Glass Transition Temperature, °C | 82 |
| Service Temperature, °C | -55 to 200 |
| Coefficient of Thermal Expansion, ppm/°C | |
| Below Tg | 56 |
| Above Tg | 175 |
| Ionic Impurities: | |
| Chloride (Cl ⁻) | < 50 ppm |
| Sodium (Na ⁺) | < 10 ppm |
| Potassium (K ⁺) | < 10 ppm |

INSTRUCTIONS FOR USE:

1. Remove from the freezer, do not remove the cover and let it thaw at room temperature for about 5 to 10 minutes depends on the quantity.
2. Wipe any condensed moisture from the container and open the cover.
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.

AVAILABILITY:

Premixed and frozen - Packaged in 1cc, 3cc, 5cc, 10cc disposable syringes and 1lb. container.

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.