



ISO 9001-2008 Certified

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TECHNICAL BULLETIN

EPOXIOHM-23M ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE

EPOXIOHM-23M is two parts, low viscosity, silver filled, and high electrical conductivity epoxy adhesive. It is designed to cure at room temperature or rapidly at elevated temperature and exhibits very excellent adhesion and bond strength to a wide variety of substrates. It can also be used for EMI/RFI shielding applications.

TYPICAL HANDLING PROPERTIES:

Adhesive	EO-23M
Hardener	EH-9
Mix ratio by weight (Adhesive: Hardener)	100:4
Mix Viscosity @ 25°C, cps (Cone & Plate viscometer, spindle-51, 50 rpm)	4000-6000
Work Life (25 grams), hour	1
Shelf life:	
Two Parts Kit @ 25°C	1 year
Frozen @ -40°C	1 year
Recommended Cure	2 hr @ 80°C
Alternate Cure	24-48 hrs @ 25°C

TYPICAL CURED PROPERTIES:

(Tested at 25°C unless otherwise indicated)

Color	Silver
Specific Gravity	2.9
Hardness, Shore D	84
Lap Shear Strength to Aluminum, psi	1700
Volume Resistivity, ohm-cm	0.0008
After 100 hrs @ 150°C	0.0009
After 1000 hrs @ 150°C	0.0009
Glass Transition Temperature (Tg), °C	68
Thermal Conductivity, W/mK	2.0
Service Temperature (Tg), °C	-55 to 150
Coefficient of Thermal Expansion, 10 ⁻⁶ /°C	
Below Tg	62
Above Tg	180
Ionic Impurities*:	
Chloride (Cl ⁻)	< 100 ppm
Sodium (Na ⁺)	< 20 ppm
Potassium (K ⁺)	< 20 ppm

INSTRUCTIONS FOR USE:

- Mix each component thoroughly before use.
- Weigh each 100 grams of EO-23M to 4 grams of Hardener-9.
- Mix until uniform. Scrape the sides and bottom of container repeatedly during mixing.
- Apply to clean bonding surfaces and cure as recommended to achieve the desired properties. Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

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

AVAILABILITY:

2 parts Kit - Packaged in 4 OZ, 8 OZ and 1 lb. container.
Premixed and frozen - Packaged in 3cc, 5cc and 10cc disposable syringes.

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.

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.