

# **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 9,000 – 12,000

(Cone plate, spindle#51, 5 rpm)

Or

Shelf life  $@0^{\circ}C$  3 months  $@<20^{\circ}C$  1 month

Recommended Cure: (Bondline curing Temperature)

1-2 minutes @ 175°C 5 minutes @ 150°C 30 minutes @ 125°C

Or 1 hr @ 100°C

## TYPICAL CURED PROPERTIES:

(Tested at 25°C unless otherwise indicated)

Color Specific Gravity	Silver 3.2
	3.2 89
Hardness, Shore D	0,
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.

## **Authorized Distributor**



1-800-375-0605 www.rudolphbros.com