



ISO 9001-2015 Certified

718 Park East Drive, Woonsocket, RI 02895, USA  
Phone: (401) 726-4500  
info@epoxyset.com ■ Web: www.epoxysetinc.com

# TECHNICAL BULLETIN

## EPOXIOHM™ EO-32HTK HIGH CONDUCTIVITY EPOXY ADHESIVE

**EO-32HTK** is pure silver filled, two components epoxy adhesive that has high thermal & electrical conductivity. It has smooth creamy consistency with long work life at room temperature. It can cure at low temperature as well as rapid cure at higher temperature for high volume applications.

It can be used for microelectronics and chip bonding in optoelectric applications. It can be applied by silk screening, transfer printing, automatic dispensing or hand probe.

### TYPICAL HANDLING PROPERTIES:

Mix ratio by weight (A: B)	100:2
Mix Viscosity @ 25°C, cps (Cone & Plate viscometer, spindle-51, 100 rpm)	40,000-50,000
Work Life (25 grams), days	>2 days
Shelf life:	
<b>Two Parts Kit @ 25°C</b>	1 year
<b>Frozen @ -40°C</b>	1 year

### Recommended Cure- (Bondline curing temperature) USE ANY OF THE BELOW CURE SCHEDULE

- 15 minutes @ 150°C
- 30 minutes @ 120°C
- 2-3 hours @ 80-90°C

### TYPICAL CURED PROPERTIES:

(Tested at 25°C unless otherwise indicated)

Color	Silver
Specific Gravity	3.7
Hardness, Shore D	85
Lap Shear Strength to Aluminum, psi	>1000
Volume Resistivity, ohm-cm	<0.0003
Thermal Conductivity, W/mK	12.4
Glass Transition Temperature, °C	117
Service Temperature, °C	-55 to 300
Coefficient of Thermal Expansion, ppm/°C	
Below Tg	42
Above Tg	180
Ionic Impurities, ppm	
Cl <sup>-</sup>	<100
Na <sup>+</sup>	<20
K <sup>+</sup>	<20

### INSTRUCTIONS FOR USE:

1. Mix each component thoroughly before use.
2. Weigh 10 grams of PART-A to 0.2 grams (7-8 drops) of Part B.
3. Mix until uniform. Scrape the sides and bottom of container repeatedly during mixing.
4. 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 2oz, 4oz, 8oz and 16oz (by weight) containers. **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 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.

**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.