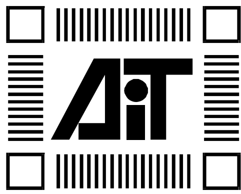

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PRIMA-SOLDER

# EG8050-LV

## Stress-Free
## One or Two Component
## Reworkable
## Epoxy Paste Adhesive

## IDEAL FOR:

- Large Area Die
- Substrate/Component
- Reworkability
- Mismatched CTE's
- Solder Replacement

## DESCRIPTION:

EG8050-LV is an electrically conductive, silver filled epoxy which exhibits outstanding flexibility for bonding materials with highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper).

It can be readily reworked at 80-150ºC and is ideal for applications such as large area die attach and substrate attach because of it's ability to bond materials with highly mismatched CTE.

## AVAILABILITY:

EG8050-LV is available in syringes for automatic needle dispense applications or in jars. Both viscosity and thixotropic index can be modified to your specific needs. EG8050-LV can be premixed and frozen.

## APPLICATION PROCEDURES:

( 1 ) Mix adhesive in 1:1 weight. (Note: In kit form, Viscosity of Part A > Viscosity of Part B)

( 2 ) Dispense adhesive onto clean substrate.

( 3 ) Cure according to one of the recommended cure schedules.

## TYPICAL PROPERTIES*

| Property | Value |
|---|---|
| Electrical Resistivity ( 150 ºC/ 60 min ) | $<4\times10^{-4}$ ohm-cm |
| Dielectric Strength (Volts/mil) | N/A |
| Glass Transition Temp.(ºC) | -20 ±10% |
| Current Carrying Capabilities | 35 Amp/mm² |
| Lap-Shear Strength | >800 psi<br>>5.5 N/mm² |
| Device Push-off Strength | >1500 psi<br>>10.3 N/mm² |
| Cured Density (gm/cc) | 4.0 ±10% |
| Thermal Conductivity | 55 Btu-in/hr-ft²-ºF ±10%<br>7.9 W/m-ºC ±10% |
| Linear Thermal Expansion Coeff. (ppm/ºC) | 120 |
| Maximum Continuous Operation Temp. (ºC) | <130 |
| Avg. Viscosity(0.5 rpm, 25ºC) (Brookfield DV-1, Spindle CP51) | 130,000 cp ±20% |

* Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is intended to be used in manufacturing and in the final product.

## **CURE SCHEDULES:

| Temperature | Time |
|---|---|
| 25ºC | 120 hr |
| 80ºC | 8 hr |
| 100ºC | 4 hr |
| 125ºC | 2 hr |
| 150ºC | 1 hr |

If Part A viscosity increases, it can be lowered using mek, acetone or ipa to get the viscosity needed using a drop or 2 at a time and mix well. It can also be heated up to 50C to lower the viscosity, Mix well & take amount needed. Allow to cool before mixing with Part B.

**If material is premixed and frozen, thaw for 30 minutes and cure according to one of the recommended schedules.

**Shelf life is for unmixed components. If premixed: -40ºC for 6 months in original sealed package. After mixing, pot life is 4 hours at 25ºC.

## SHELF LIFE:

| Storage temperature | Shelf Life |
|---|---|
| **25ºC | 1 yr<br>in original sealed package |

CAUTION: This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details.

The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is to be used in manufacturing and in the final product. Under no circumstance shall AI Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

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