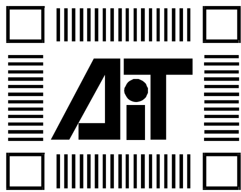

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PRIMA-SOLDER

EG8050

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 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). Post bake at 100C or 125C for 24 hrs using a vacuum or air flow oven is recommended in order to pass NASA outgassing testing.

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 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 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)	$<4x10^{-4}$ ohm-cm
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(ºC)	-20 ±10%
Current Carrying Capabilities	35 Amp/mm²
Lap-Shear Strength	>1000 psi >6.9 N/mm²
Device Push-off Strength	>2000 psi >13.8 N/mm²
Cured Density (gm/cc)	4.0 ±10%
Thermal Conductivity	55 Btu-in/hr-ft²-ºF ±10% 7.9 W/m-ºC ±10%
Linear Thermal Expansion Coeff. (ppm/ºC)	120
Maximum Continuous Operation Temp. (ºC)	<150
Avg. Viscosity(0.5 rpm, 25ºC) (Brookfield DV-1, Spindle CP51)	185,000 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	168 hr
80ºC	8 hr
100ºC	4 hr
125ºC	2 hr
150ºC	1 hr

**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.

1 cps= 1cP=1mPa·s; 1 psi= 145 MPa=N/mm²; 1 lb= 0.225 N; 1 inch=25.4 mm; 1 V/mil= 25.4 kV/mm; 1 lb-in= 8.851 N-m

SHELF LIFE:

Storage temperature	Shelf Life
**25ºC	1 yr 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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