



One Component Epoxy Adhesive

Product Description

JE085-2 is a one component epoxy adhesive for electronic devices bonding. This product exhibits good adhesion strength. This resin can be fast cure at medium low temperature and is suited for different kinds materials bonding. This resin has excellent durability. It has passed many different environmental tests and is suitable for applications that require low precipitation in the bonding area, such as the assembly of optical lens voice coil motors and C-MOS bonding of thermal components.

Features

1. This product is solvent-free and non-volatile system.
2. This product has the characteristics of low precipitation, which can reduce pollution.
3. The surface of this cured product will not appear greasy, and it will show low gloss.
4. It offers excellent chemical resistance and solvent resistance.
5. Cured resin has excellent protection and vibration resistance for electronic devices.
6. This product complies to the 2011/ 65/EU RoHS regulations.
7. This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.

Typical Uncured Properties

	JE085-2
Appearance	Liquid
Color	Black
Viscosity 25°C, S14 50rpm, cps	10,670

Typical Curing Properties

Pot Life 25°C, days	2
Recommended Cured Time 90 °C, min	40
Recommended Cured Time 100 °C, min	30

Direction of Use

1. The package of this resin which is refrigerated in -20°C ~ -5°C . Before use, please place the product in a cold storage (2 °C ~13 °C) for 1 hour and then put it at room temperature (14 °C ~ 34 °C) for 1 ~ 1.5 hours to warm up. Do not loosen container cover before temperature equilibration.
2. Bonding surfaces should be clean, dry and properly prepared.
3. Apply adhesive to one or both substrates to be bonded. The parts must be held in contact until the adhesive is cured.
4. Cure time on the really part will depend upon factors such as part geometry, materials to be bonded, bondline thickness and efficiency of the oven. Cure schedule should be confirmed with actual production parts and equipment.

Typical Cured Properties*1

Glass Transition Temp.,(DSC), °C	28
CTE*2 (<Tg), μm/m/ °C	76
CTE*2 (>Tg), μm/m/ °C	236
Specific Heat 0°C, J/g°C	1.197
Specific Heat 25°C, J/g°C	1.388
Specific Heat 50°C, J/g°C	1.597
Specific Heat 75°C, J/g°C	1.628
Specific Heat 100°C, J/g°C	1.643
Durometer Hardness, Shore D	75~82
Specific Gravity	1.39
Water Absorption Ratio (25°C /24hr), %	0.45
Water Absorption Ratio (80°C /24hr), %	3.05
Water Absorption Ratio (97°C /1.5hr), %	1.83
Degradation Temp., (TGA 10°C /min), °C	291
Weight Loss Ratio@100°C, %	<0.5
Weight Loss Ratio@150°C, %	<0.5
Weight Loss Ratio@200°C, %	1.26
Weight Loss Ratio@250°C, %	2.67
Weight Loss Ratio@300°C, %	5.97
Weight Loss Ratio@350°C, %	24.05

*1 Specimen Cure Condition : 90°C / 40min

*2 CTE: Coefficient of Thermal Expansion

Storage and Shelf Life

This resin should be kept without any possibility of moisture and heat exposure. It should be storage at -20°C ~ -5°C before opening the containers. Shelf life of this product is six months. Before using, it should place this product at 2 °C ~13 °C for 1 hour and then put in 14~34°C for 1 to 1.5 hours. The properties will be changed when replace this product at room temperature for long time.

Caution

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product by long term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. It is important to remove adhesive from skin with soap and water thoroughly. DO NOT use solvents for cleaning hands. This product of moderate acute toxicity by swallowing. If swallowed, call a physician. Avoid contact with eyes. In case of contact, flush with water for at least 15 minutes and get medical attention immediately. For specific information on this product, consult the Material Safety Data Sheet.