

## Epoxy for Potting

### Product Description

JE185 is two component epoxy adhesive. The resin and hardener have good fluidity and operability after being evenly stirred, and are suitable for potting of electronic components. This resin exhibits excellent toughness, low thermal stress and thermal shock resistance. A clean surface can be applied, the precise ratio while mixing Part A and Part B, and complete mixing of these two components are required to obtain optimum properties.

### Features

1. After mixing, this resin is easy to operate and has excellent fluidity. It is used for potting.
2. This product has no volatile materials and will not release any toxic volatilizations.
3. This product complies to the 2011/65/EU RoHS regulations.
4. The recommended temperature range of this product is -55 °C ~160 °C.
5. This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.

### Typical Uncured Properties

	JE185A	JE185B
Appearance	Liquid	Liquid
Color	Black	Yellow
Viscosity 25°C, S14 100rpm cps	1,300	<200
Specific Gravity	1.16	1.01

### Typical Curing Properties\*

Mix Ratio (A : B) by Weight	2 : 1
Pot Life 25°C, min	30
Surface Dry Time, 25°C, hr	24
Through Cure Time, 25°C, days	5~7
Through Cure Time, 80°C, hr	1

\*A : B=4g : 2g

### Direction of Use

1. Weight the correct proportions to within 2% accuracy and mix thoroughly together, scraping both the bottom and the sides of mixing container, until a homogeneous mixture is obtained.
2. Mix thoroughly by volume 2 : 1. Mix approximately 30 seconds after uniform color is obtained.
3. Bonding surfaces should be clean, dry and properly prepared.
4. For optimum properties mixed, this product should be used before its pot life.
5. 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.,(TMA),°C	55
Durometer Hardness, Shore D	83
CTE*2 (<Tg), μm/m/ °C	64
CTE*2 (>Tg), μm/m/ °C	228
Shear Strength* Al vs. Al, kgf/cm <sup>2</sup>	121

\*1 Specimen Cure Condition : 80°C/ 1hr

\*2 CTE: Coefficient of Thermal Expansion

\*3 Specimen Cure Condition : 80°C/ 60min, Specimen area:  
2.5mm x 0.5mm

### Storage and Shelf Life

The container should be stored in cool and dark place. The resin and hardener will become yellow under the sunlight. Replace the lid immediately after use. Keep without any possibility of wet when not using. Shelf life of this product is one year when stored below 14~34°C in original, unopened containers.

### 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 is 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.