



Two Component Epoxy Resin for Potting and Bonding

Product Description

JB373-6 is two component epoxy resin for electronic devices. This resin has low viscosity, good transparency, perfect surface gloss and high adhesion strength. This product can fast cure at low temperature and is suited for metals, glasses, ceramics, and plastics bonding

Features

1. This product is easy to use and mix.
2. The hardener of this product which is exposed in air will not yield a insoluble, whitish solid.
3. This resin offers excellent retention of electrical insulation properties.
4. This product exhibits high adhesion strength, greasy resistance, chemical and solvent resistance. The hardening surface will not exhibit a surface oiliness and poor gloss.
5. This resin has excellent dimensional stability over a wide temperature range.
6. This product complies to the 2011/65/EU RoHS regulations.

Typical Uncured Properties

	JB373-6A	JB373-6B
Appearance	Liquid	Liquid
Color	Colorless	Colorless to light yellow
Viscosity 25°C, cps	6,400~9,600	3,600~5,600
	S14 50rpm	S14 100rpm

Typical Curing Properties*

Mix Rate (A : B) By Weight	2 : 1
Pot Life, 25 °C, min	20~30
Through Cure Time, 25 °C, days	5~7
Through Cure Time, 80°C, hr	1

*A : B=2g : 1g

Direction of Use

1. It should be applied to a clean surface which is free of dirt, grease or mold release. In many cases, a simple solvent wipe is sufficient.
2. 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.
3. 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., (MDSC), °C	55
Glass Transition Temp., (TMA), °C	52
CTE*2 (10~30°C), µm/m/°C	59
CTE*2 (80~120°C), µm/m/°C	289
Specific Heat 0°C, J/g°C	4.97
Specific Heat 25°C, J/g°C	5.15
Specific Heat 50°C, J/g°C	5.60
Specific Heat 75°C, J/g°C	6.04
Specific Heat 100°C, J/g°C	6.23
Durometer Hardness, Shore D	81
Specific Gravity	1.18
Water Absorption(25°C / 24hr), %	0.35
Water Absorption(80°C / 24hr), %	2.15
Water Absorption(97°C /1.5hr), %	0.73
Shear Strength Al vs. Al, kgf/cm ²	221
Degradation Temp (TGA 10 °C /min), °C	242
Weight Loss Ratio@100°C, %	< 0.5
Weight Loss Ratio@150°C, %	0.56
Weight Loss Ratio@200°C, %	2.55
Weight Loss Ratio@250°C, %	5.53
Weight Loss Ratio@300°C, %	8.59
Weight Loss Ratio@350°C, %	15.48
Thermal Conductivity W/mK	0.35
Thermal Resistance m ² K/W	0.01
Volume Resistivity, ohm-cm	5*10 ¹⁵
Surface Resistivity, ohm	5*10 ¹⁴
Dielectric Constant 100Hz	4.0

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

*2 CTE: Coefficient of Thermal Expansion

Storage and Shelf Life

The container should be stored in cool and dark place. The resin and hardener will become yellow under the sunlight. Part B is amine content, 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 more information, refer to the Material Safety Data Sheet.