

Two Component Epoxy for Casting

Product Description

JC832 is a two component epoxy for casting. This resin exhibits high transparent and low yellowing properties. This product is a recommended resin for many applications. This resin exhibits good handling, chemical resistance and perfect surface gloss. It is well suited for electronic devices and plastics casting.

Features

1. This product has low viscosity, good fluidity and good handle properties for casting.
2. The color and low yellowing properties of this product surpass conventional plasticized epoxy.
3. The hardener of this product which is exposed in air will not yield a insoluble, whitish solid.
4. The hardening surface will not exhibit a surface oiliness and poor gloss.
5. This product complies to the 2002/ 95EC RoHS regulations.

Typical Uncured Properties

	JC832A	JC832B
Appearance	Liquid	Liquid
Color	Colorless	Colorless
Viscosity 25 °C, cps	900~1,400	<100
	S14 100rpm	S21 100rpm
Specific Gravity (20/20°C)	1.12	0.95

Typical Curing Properties*

Mix Rate (A:B) By Weight	4 : 1
Pot Life, 25°C, hr	2~3
Through Cure Time, 25°C, days	5~7
Through Cure Time, 80°C, hr	1

*A:B=4g:1g

Direction of Use

1. The resin 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. Mix thoroughly by weight 4 : 1. Mix approximately 15 seconds after uniform color is obtained.
3. 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.
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.,(MDSC),°C	31
Glass Transition Temp.,(TMA),°C	35
CTE*2 (-10~20 °C), μm/m/°C	70
CTE*2 (70~100 °C), μm/m/°C	265
Specific Heat 0°C, J/g°C	5.03
Specific Heat 25°C, J/g°C	5.37
Specific Heat 50°C, J/g°C	5.89
Specific Heat 75°C, J/g°C	6.10
Specific Heat 100°C, J/g°C	6.27
Durometer Hardness, Shore D	71
Specific Gravity (20/20°C)	1.09
Water Absorption Ratio(25°C /24hr), %	0.5
Water Absorption Ratio(80°C /24hr), %	0.6
Water Absorption Ratio(97°C /1.5hr), %	1.2
Degradation Temp, (TGA 10°C /min) °C	167
Weight Loss Ratio @ 100°C, %	0.32
Weight Loss Ratio @ 150°C, %	3.10
Weight Loss Ratio @ 200°C, %	9.66
Weight Loss Ratio @ 250°C, %	15.68
Weight Loss Ratio @ 300°C, %	21.23
Weight Loss Ratio @ 350°C, %	27.31

*1 Cure Condition:80°C / 1hr

*2 CTE: Coefficient of Thermal Expansion

Storage and Shelf Life

It should be storage in cool and dark place in order to prevent the resin and hardener will become yellow under sunshine. This product is amine content, replace lid immediately after use. Keep without any possibility of wet when not using. This product has a one year minimum shelf life when stored below 25 °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.