Technical Data Sheet

JB007-1

Epoxy for Optoelectronic Devices Potting and Bonding

Product Description

JB007-1 is epoxy resin for optoelectronic devices. This resin has good operability, excellent surface gloss after curing, and good resistance to chemicals. Due to its rapid cured at low temperature, this product has two characteristics of application method and rapid cured. It is a widely used epoxy resin. This product can be applied to infusion of metal and plastic This resin can completely seal the electronic parts in the insulating container. This product has excellent durability and can pass many different environmental tests.

Features

- 1. The hardener of this product which is exposured in air will not yield a insoluble, whitish solid.
- 2. It offers excellent retention of electrical insulation properties under high humidity conditions.
- 3. The resin cure rapidly at room temperature.
- 4. The hardening surface will not exhibit poor gloss.
- 5. This product complies to the 2011/65/EU RoHS regulations.

Typical Uncured Properties

	JB007-1A	JB007-1B
Appearance	Liquid	Liquid
Color	Black	Brown
Viscosity 25°C, cps	7,000~15,000	8,000~10,000
	S14 100 rpm	S14 50 rpm
Specific Gravity	1.16	1.00
solid content, %	100	100

Typical Curing Properties

Mix Ratio (A: B) by Weight	2:1
Pot Life 25°C, min	30
Surface Dry Time, 25°C, hr	6~8
Through Cure Time, 25°C, days	5
Through Cure Time 80°C hr	1

Direction of Use

- 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. Mix thoroughly by weight 2:1. Mix approximately 15 seconds after uniform color is obtained.
- 3. According to the ideal mixing of this product, this resin should be used up within the usable time.
- For maximum bonding strength apply adhesive evenly to both surfaces to be jointed.
- This product can be used with dual syringe cartridge can be obtained by requesting a copy of "Introduction for Adhesive Cartridge Dispenser", F-06122201.

Typical Cured Properties*

Glass Transition Temp.,(DSC), °C Durometer Hardness, Shore D	60 80~85
Water Absorption Ratio (25°C /24hr), %	0.5
Tensile Strength, Mpa	2.2
Tensile Modulus, MPa	2.6
Breaking elongation, %	1.0
Impact Strength (Izod), J/M	4.0
Degradation Temp, (TGA 10°C /min), °C	250
Temperature Range, °C	-50~120
Volume Resistivity, ohm-cm	5*10 ¹⁵
Surface Resistivity, ohm	5*10 ¹⁴
Dielectric Constant 100Hz	4.0

^{*} Specimen Cure Condition: 25°C / 5days

Storage and Shelf Life

The container should be stored in cool and dark place. The resin and hardener will become yellow under the sunlight. This product 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 $14\sim34^{\circ}C$ 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.

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The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others or whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.