



Two Component Epoxy

Product Description

JB564-10 is two component epoxy. This product has good viscosity and toughness. Cured resin exhibits high adhesion strength, greasy resistance, chemical and solvent resistance. This product has good electrical insulation properties and is suitable for glass, ceramics, plastics and metals bonding.

Features

1. This resin offers excellent retention of electrical insulation properties under high humidity conditions.
2. This product exhibits good viscosity, excellent thixotropic. This product can be also controlled flow and have sag resistance.
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. For its performance and reliability, this resin is used widely in various areas.
6. After Part A and B mixing, cured product is matte at room temperature. Cured product will become bright after curing at 80°C.
7. This product complies with the 2011/65/EU RoHS regulations.
8. This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.

Typical Uncured Properties

	JB564-10A	JB564-10B
Appearance	Viscous liquid	Viscous liquid
Color	Black	Yellow
Viscosity 25°C, cps	250,000~400,000	25,000~45,000
	S14 3rpm	S14 20rpm
Thixotropic Index	>5	>2
Specific Gravity	1.35	1.31

Typical Curing Properties

Mix Ratio (A : B) by Weight	1 : 1
Pot Life 25°C, min	20
Gel Time 25°C, min	60
Through Cure Time 25°C, days	3~5
Through Cure Time 80°C, min	60
Through Cure Time 100°C, min	20

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. Mix thoroughly by weight 1 : 1. Mix approximately 15 seconds after uniform color is obtained.
3. For optimum properties mixed, it should be used before its pot life. Large quantity mixing is not recommended for this product.

4. The handling information of this product supplied in dual syringe cartridge can be obtained by requesting a copy of "Introduction for Adhesive Cartridge Dispenser", F-06122201.
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*

Glass Transition Temp., (MDSC), °C	40
CTE*2 (<Tg), µm/m/°C	80
CTE*2 (>Tg), µm/m/°C	168
Durometer Hardness, Shore D	76
Water Absorption (25°C /24hr), %	0.26
Water Absorption (80°C /24hr), %	2.13
Water Absorption (97°C /1.5hr), %	1.62
Shear Strength Al vs. Al, kgf/cm ²	180
Degradation Temp, (TGA 10°C /min), °C	240
Weight Loss Ratio@100°C, %	0.11
Weight Loss Ratio@150°C, %	1.01
Weight Loss Ratio@200°C, %	2.22
Weight Loss Ratio@250°C, %	3.24
Thermal Conductivity, W/mK	0.3
Thermal Resistance m ² K/W	0.01
Volume Resistivity, ohm-cm	4.5*10 ¹⁵
Surface Resistivity, ohm	4.5*10 ¹⁴
Dielectric Constant 1KHz	3.2

*1 Specimen Cure Condition : 25°C / 7days

*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. 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 14~34°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.