

Fast-setting Epoxy for Bonding

Product Description

JD192 is a two component epoxy resin for fast curing. This resin exhibits high adhesion strength, greasy resistance, chemical and solvent resistance. This product is suitable for plastics, ceramics, glass and metals bonding. This resin is recommended as a general adhesive where convenience and speed at room temperature is desired.

Features

1. This resin exhibits good toughness and adhesion strength.
2. This product offers good adhesion strength to many plastic and metals.
3. With initial strength, this resin can handle after 30 minutes.
4. This product is able to reduce the working time and increase the efficiency at the same time.
5. The hardening surface will not offer a surface oiliness and poor gloss.
6. This product complies to the 2011/65/EU RoHS regulations.

Typical Uncured Properties

	JD192A	JD192B
Appearance	Liquid	Liquid
Color	Milky	Yellow
Viscosity 25°C, S14 20rpm, cps	13,000~18,000	30,000~45,000
Specific Gravity	1.16	1.15

Typical Curing Properties

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

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, this product should be used before its pot life. Large quantity mixing is not recommended for this product.
4. For maximum bonding strength apply adhesive evenly to both surfaces to be joined.
5. 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.
6. 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	46
CTE*2 (<Tg), μm/m/°C	52
CTE*2 (>Tg), μm/m/°C	180
Durometer Hardness, Shore D	80
Specific Gravity	1.16
Shear Strength*3 Al vs. Al, kg	162
Shear Strength*3 Copper vs. Copper, kg	246
Shear Strength*3 Stainless Steel vs. Stainless Steel, kg	190
Shear Strength*4 ABS vs. ABS, kg	117
Degradation Temp., (TGA 10°C /min) °C	324
Weight Loss Ratio @ 100°C, %	0
Weight Loss Ratio @ 150°C, %	0.09
Weight Loss Ratio @ 200°C, %	0.22
Weight Loss Ratio @ 250°C, %	0.57
Weight Loss Ratio @ 300°C, %	2.12
Weight Loss Ratio @ 350°C, %	11.68
Volume Resistivity, ohm-cm	5*10 ¹⁵
Surface Resistivity, ohm	5*10 ¹⁴
Dielectric Constant 100Hz	4.1

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

*2 CTE: Coefficient of Thermal Expansion

*3 Cross-sectional Area of Specimen 2.5cm x 0.3cm; Specimen Cure Condition: 80°C / 1hr

*4 Cross-sectional Area of Specimen 1cm x 2.5cm; Specimen Cure Condition: 80°C / 1hr

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 mercaptan content, replace the 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 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. This product is of moderate acute toxicity by swallowing. If swallowed, call a doctor. Avoid contact with eyes. In case of contact, flush with water for at least 15 minutes and get medical attention. For specific information on this product, consult the Material Safety Data Sheet.