



Fast-setting Epoxy for Bonding

Product Description

JA484-21 is two-component epoxy resin designed for fast curing. This product exhibits outstanding adhesion strength, greasy resistance, chemical resistance and solvent resistance. This product is suited for plastics, ceramics, glass and metals bonding. This product can fast cure at room temperature which has two advantages of use convenience and shorten manufacturing process. This product is recommended as a generally applied adhesive.

Features

1. This product exhibits good handling property after mixing.
2. This product offers outstanding adhesion strength to many plastic and metals materials.
3. With initial strength, this resin can be processed into next manufacturing process after 20 minutes.
4. This product can shorten the working time and increase the efficiency at the same time.
5. The hardening surface of this product will not offer a surface oiliness and poor gloss.
6. This product complies to the 2011/65/EU RoHS regulations.
7. This product complies to UL94V-0 regulations.

Typical Uncured Properties

	JA484-21A	JA484-21B
Appearance	Liquid	Liquid
Color	White to yellow	White to yellow
Viscosity 25°C, cps	110,000~190,000	145,000~220,000
Thixotropic Index	≥ 3	≥ 3

Typical Curing Properties*

Mix Rate (A : B) By Weight	1 : 1
Pot Life, 25°C, min	10
Tack Free Time 25°C, min	13~15
Through Cure Time 25°C, day	3
Through Cure Time 80°C, hr	1

*A : B=1g : 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. 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 jointed.
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.

Typical Cured Properties*1

Glass Transition Temp., (MDSC)°C	25
CTE*2 (-20~20°C), μm/m/°C	38
CTE*2 (60~100°C), μm/m/°C	247
Specific Heat 0°C, J/g°C	5.62
Specific Heat 25°C, J/g°C	6.22
Specific Heat 50°C, J/g°C	6.58
Specific Heat 75°C, J/g°C	6.72
Specific Heat 100°C, J/g°C	6.81
Durometer Hardness, Shore D	70
Specific Gravity	1.6
Water Absorption Ratio(25°C /24hr), %	2.46
Water Absorption Ratio(80°C /24hr), %	6.55
Water Absorption Ratio(97°C /1.5hr), %	4.37
Degradation Temp, (TGA 10°C /min) °C	324
Weight Loss Ratio @ 100°C, %	0.58
Weight Loss Ratio @ 150°C, %	0.93
Weight Loss Ratio @ 200°C, %	1.09
Weight Loss Ratio @ 250°C, %	1.38
Weight Loss Ratio @ 300°C, %	2.54
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

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. Shelf life of this product is 1 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. 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.