



## Fast-setting Epoxy for Bonding

### Product Description

JA484 is a two-component epoxy resin for fast-curing. Cured product exhibits high adhesion strength, greasy resistance, chemical resistance and solvent resistance. This product can be applied on plastics, ceramics, glass and metals bonding. This product is recommended as a general which has two advantages of use convenience and shorten manufacturing process.

### Features

1. After mixing, this product exhibits excellent operability.
2. This product offers outstanding adhesion strength to many plastics and metals.
3. With initial strength, this product can be operated after 20 minutes.
4. This product can shorten the working time and can increase the work efficiency meanwhile.
5. The hardening surface of this product will not offer a surface oilness and poor gloss.
6. This product complies to the 2011/65/EU RoHS regulations.

### Typical Uncured Properties

	JA484A	JA484B
Appearance	Liquid	Liquid
Color	Colorless	Light Yellow clear
Viscosity 25°C, S14 20rpm, cps	7,000~17,000	10,000~15,000
Specific Gravity	1.16	1.11

### Typical Curing Properties

Mix Ratio (A : B) by Volume	1 : 1
Mix Ratio (A : B) by Weight	1 : 1~0.95
Pot Life, 25°C, min	3
Surface Dry Time, 25°C, 2g, min	13
Through Cure Time, 25°C, day	3

### Direction of Use

1. This product 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	52
CTE*2 (>Tg), μm/m/°C	218
Durometer Hardness, Shore D	84
Water Absorption Ratio(25°C / 24hr), %	2.6
Water Absorption Ratio(80°C / 24hr), %	9.06
Water Absorption Ratio(97°C / 1.5hr), %	5.77
Shear Strength*1, Al vs. Al, kgf/cm <sup>2</sup>	207
Shear Strength*3, Al vs. Al, kgf/cm <sup>2</sup>	154
Tensile Strength, MPa	40
Elongation, %	3.8
Flexural Strength, MPa	68
Flexural Modulus, MPa	2,000
Compression Strength, MPa	70
Degradation Temp, (TGA 10°C /min) °C	332
Weight Loss Ratio @100°C, %	0
Weight Loss Ratio @150°C, %	0.2
Weight Loss Ratio @200°C, %	0.4
Weight Loss Ratio @250°C, %	0.7
Weight Loss Ratio @300°C, %	1.6
Volume Resistivity, ohm-cm	5*10 <sup>15</sup>
Surface Resistivity, ohm	5*10 <sup>14</sup>
Dielectric Constant 100Hz	4.1
Temperature Range, °C	-20~80

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

\*2 CTE: Coefficient of Thermal Expansion

\*3 Specimen Cure Condition: 80°C / 1 hr

### Storage and Shelf Life

This product 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 moisture when not use. Shelf life of this product is 1 year when stored at 14~34°C in the original and 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.