

ET5108

Fast-setting Epoxy for Bonding

ET5108 is a two-component epoxy resin designed for fast cure. This resin exhibits high adhesion strength, greasy resistance, chemical and solvent resistance. This resin is suited for plastics, ceramics, glass and metals bonding. This product is recommended as a general adhesive that can fast cure at desired room temperature. The two specialties of this product are convenient to use and can shorten the product process.

FEATURE

- This resin exhibits great operation after mixing.
- This product offers good adhesion strength to many plastics and metals.
- With the advantage of fast initial strength, the user can proceed next product process after about 20 minutes.
- This product is able to reduce the working time and increase the efficiency at the same time.
- The hardening surface will not exhibit oilness and poor gloss.
- This product complies to the 2011/65/EU RoHS regulations.
- This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.

TYPICAL UNCURED PROPERTIES

Properties	ET5108-A	ET5108-B
Appearance	Liquid	Liquid
Color	Colorless	Light yellow
Viscosity *25°C, cps	15,000 ~ 23,000 S14, 20 rpm	10,000 ~ 15,000 S14, 20 rpm
Specific Gravity	1.16	1.11

TYPICAL CURING PROPERTIES

Properties	ET5108
Mix Ratio (A:B) by Weight	1:1
Pot Life, 25°C, min	3
Surface Dry Time, 5g, 25°C, min	13
Through Cured Time 25°C, days	3

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.
- Mix thoroughly by weight 1:1. Mix approximately 15 seconds after uniform color is obtained.
- For optimum properties mixed, this product should be used before its pot life. Large quantity mixing is not recommended for this resin.
- For maximum bonding strength apply adhesive evenly to both surfaces to be jointed.
- 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.

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.

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TYPICAL CURED PROPERTIES (*1)

Properties	ET5108
Glass Transition Temp., (DSC), °C	52
CTE (*2) (100-180°C), $\mu\text{m}/\text{m}/^\circ\text{C}$	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
Tensile Strength, MPa	40
Elongation, %	3.8
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^{15}
Surface Resistivity, ohm	5×10^{14}
Dielectric Constant. 100Hz	4.1
Shear Strength, Al vs. Al, Kg/cm ²	207
Flexural Strength, MPa	68
Flexural Modulus, MPa	2000
Compression Strength, MPa	70

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

(*2) CTE: Coefficient of Thermal Expansion

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 resin 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.

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 over 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.

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