



Never compromise on quality!

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# EPOXY ADHESIVE

## 5 Minute Quick Setting Epoxy

### Description

*A rapid curing, general purpose adhesive, encapsulant, that forms a clear, hard, rigid bond or coating in minutes.*

**5 minute fixture time. Cures fast for quick metal-to-metal bonding.**

**100% reactive, no solvents and repairs.**

**Good dielectric strength - pots and encapsulates electronic components.**

**Good solvent resistance.**

### Uses

Bond It EPOXY ADHESIVE can be used to bond metal, fabric, ceramic, glass, wood & concrete.

It will also seal against dust, dirt and contamination.

Fast-curing, thin set, bonding above 40°F.

### Preparation

Surfaces to be bonded must be clean, dry and free from dust, grease, oil or any other contaminants that may hinder adhesion. Preferably wipe the surface with a solvent cleaner and abrade/ roughen any metal surfaces to promote adhesion and optimise bond strength.

### Application

Apply the adhesive using the syringe only - it is essential that the resin and hardener are mixed thoroughly for the cure process to develop to the stated strengths.

Apply the mixed epoxy directly to one surface as a bead. Bring the two surfaces to be bonded together within the recommended working time. Ensure a firm contact is obtained between the two items. A small amount of epoxy should flow out the edges to show there is adequate gap-filling and contact. For very large gaps, apply the epoxy to both surfaces and spread to cover the entire area of make a bead pattern which will allow flow throughout the joint.

Leave the bonded items for the recommended cure time before handling (clamping may help promote adhesion). Do not drop or apply heavy load pressure until the items are fully cured.

### Cure Time

Ambient conditions - room temperature 20°C/ 60% RH:

Cure time will be achieved in approximately 45 minutes - 1 hour, with full bond strength reached after 16 hours.

### Storage Conditions

Store in a cool, dry place when not used for a long period of time.

### Shelf Life

3 years from date of manufacture can be expected when stored at room temperature 20°C in their original unopened containers.

### Disposal of Containers

Do not leave empty containers where residue could be harmful to children, animals or the environment. Remove any containers to a central disposal point in accordance with local regulations.

### Health & Safety

#### Contains Bisphenol A - Epoxy Resin

- ◆ Non flammable.
- ◆ Avoid eye contact. Could cause irritation. In the event of contact wash with running water for 15 minutes and seek medical attention.
- ◆ Ensure good ventilation.
- ◆ Avoid contact with skin. Could cause irritation. Wear gloves if skin is sensitive.
- ◆ Thoroughly wash hands with soap and water after use.
- ◆ Keep out of reach of children.
- ◆ See separate material safety data sheet for full handling, use and storage.

## Specification Summary

### **Physical Properties (uncured)**

|                              |                          |
|------------------------------|--------------------------|
| Mix Ratio By Volume          | 1:1                      |
| Mixed Viscosity              | 8,000-10,000 cps         |
| Working Time 28 grams @ 75°F | 4 minutes                |
| Functional Cure @ 75°F       | 45 minutes               |
| Coverage (based on 25ml/28g) | 152 sq inch @ 0.010"     |
| Specific Volume              | 23.7 in <sup>3</sup> /lb |
| % solids BY Volume           | 100                      |

### **Performance Characteristics (7 days cured @ 23°C)**

|                                      |                         |
|--------------------------------------|-------------------------|
| Adhesive Tensile Shear (ASTM D1002*) | 1,400 psi               |
| Operating Temperature, dry           | +4 - +100°C             |
| Cured Density (ASTM D792)            | 1.10 gm/cm <sup>3</sup> |
| Cured Hardness (ASTM D2240)          | 85D                     |
| Dielectric Strength (ASTM D149)      | 490 volts/mil           |

### **\*Overlap Shear Run @0.005" bond line thickness**

### **Chemical Resistance (7 days @ room temp cure / 30 days immersion @ 75°F)**

Kerosene - Very Good; Methanol - Unsatisfactory; 3% Hydrochloric Acid - Very Good; Toluene - Very Good; Chlorinated Solvent - Unsatisfactory; Ammonia - Very Good; 10% Sulphuric Acid - Very Good; 10% Sodium Hydroxide - Very Good.

Epoxies are very good in saturated salt solution, leaded gasoline, mineral spirits, ASTM#3 oil and propylene glycol.

### **Container Sizes:**

|              |           |
|--------------|-----------|
| <b>Code:</b> | BDAES     |
| <b>Size:</b> | 28g/ 24ml |

*The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties rights and, if necessary clarifying the position. Recommendations for use do not constitute a warranty, either expressed or implied, of the fitness or suitability of the products for a particular purpose.*