

CB 643 SMT Epoxy

Description

CB 643 is a one-part red adhesive based on epoxy resins. It has excellent adhesion to most printed circuit boards and electronic components. It cures fast at high temperatures. It may be cured at 80°C or faster at 150°C. It has a long pot life and long shelf life even at room temperature of 25°C. The thixotropy has been adjusted to prevent sagging.

Applications

1. SMT adhesive for bonding electronic components onto printed circuit boards
2. General bonding for many plastics, ceramics and metals
3. Suitable for pin transfer and screen printing process.

Guidelines for Use

1. Thaw the epoxy to room temperature (25°C) before use.
2. Dispense the epoxy by using a syringe.
3. Cure the epoxy by heating at 150°C for 90 seconds. Curing at lower temperature will require a longer time.
4. Wipe off any excess uncured adhesive with a piece of dry cloth or tissue. Further cleaning may be achieved with tissue wetted with isopropanol.

Properties

| Property | Test Method | Unit | Typical value |
|--|-------------|--------------------|------------------------|
| Chemical type | | | Epoxy |
| Appearance | Pen 10 | | Red paste |
| Mix ratio, by weight | | | One component |
| Shelf life, -20°C | Pen 26 | Month | 12 |
| Pot life, 25°C | Pen 26 | Week | 1 |
| Viscosity, CAP 2000+ viscometer, 25°C, Cap-06@100rpm | Pen 44 | cps | 30,000 |
| Thixotropic index, 20rpm/200rpm | Pen 37 | | 2.0 |
| Tensile strength | Pen 41 | kgcm ⁻² | 483 |
| Shear strength | Pen 36 | kgcm ⁻² | 135 |
| Water boil, wt gain, 1 hr | Pen 21 | % | 0.43 |
| Volume resistivity, 25°C | ASTM D257 | ohm.cm | 6.6 x 10 ¹⁶ |
| Tg, DSC, cured 150°C for 1 hr | Pen 19 | °C | 120 |
| Dot profile | Pen 25 | | Peak |

The values above are tested based on batch to batch basis. These values are not use as a basis for preparing specifications.

Recommended Cure

| Schedule | Temp. | Cure Time |
|----------|--------|-----------|
| A | 150 °C | 90sec |
| B | 115 °C | 300sec |

Storage

Tightly close original container of unused product and store below -20°C. Storing at lower temperatures down to -40°C may prolong shelf life beyond 6 months. However it may take longer time to thaw the product.

Packaging

- 30 ml EFD syringe
- 30 ml IEI (Iwashita) syringe
- 300 ml Semco cartridge

Environment, Health & Safety

This product is RoHS compliant. It does not contain any known carcinogenic, mutagenic or teratogenic components.

Contact Information

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