

## TH 934-4 Thermally Conductive Silicone

### Description

TH 934-4 is a white colored and thermal conductive silicone rubber system suitable for potting and thermal dissipation of electronic devices. This two part silicone can be cure at room temperature. This silicone system has high hardness and yet provides flexible to give low stress for excellent performances in temperature cycling, high temperature storage, high humidity storage and outdoor weathering.

### Applications

1. Potting, encapsulant, coating and heat dissipation for electronic device.

### Guidelines for Use

1. Stir the part A Resin and part B Crosslinker before use.
2. Add the part B cross-linker into part A resin by weight ratio 1:1. Stir with an electric mixer until the silicone is homogenously mixed.
3. Remove the air bubbles in the silicone mix by vacuum degas at 0.001 mbar (0.1 Pa) for 5 minutes.
4. The silicone mix can be dispensed with a syringe.
5. Cure the silicone at 25.0°C for 24 hours.
6. The adhesion strength of the silicone to substrate can be improved by apply CT 986-1, Silicone Primer to substrate.

### Properties

| Property                              | Test Method   | Unit    | Typical value        |                                |                               |
|---------------------------------------|---------------|---------|----------------------|--------------------------------|-------------------------------|
|                                       |               |         | Part A Resin         | Part B Crosslinker             | Mixed                         |
| Chemical type                         | -             | -       | Siloxane             | Siloxane                       | Siloxane                      |
| Appearance                            | Pen 10        | -       | White viscous liquid | Milky-yellowish viscous liquid | Slightly milky viscous liquid |
| Mix ratio, by weight                  | -             | -       | 1.00 ± 0.01          | 1.00 ± 0.01                    | -                             |
| Shelf life, 25 °C                     | Pen 26        | Month   | 12                   | 12                             | -                             |
| Pot life, 25 °C                       | Pen 57        | Minute  | -                    | -                              | 120                           |
| Viscosity, RVDV1+, S07, 100rpm, 25 °C | Pen 44        | cP      | 68,000               | 11,300                         | 21,700                        |
| Hardness, cured at 25 °C for 24 hours | Pen 29        | Shore A | -                    | -                              | 58                            |
| Thermal conductivity                  | ISO/DIS 22007 | W/mK    | -                    | -                              | 1.2                           |

7. Avoid contamination with heavy metals, amines and sulphur compounds as the silicone catalyst can be easily poisoned. Silicone may not cure properly when contaminate.
8. Wear rubber gloves when handling silicone resins and crosslinkers.

### Recommended Cure

| Temperature | Cure time |
|-------------|-----------|
| 25°C        | 24 hours  |

### Storage

Store both Part A resin and Part B crosslinker in a cool, dark place to prolong shelf life.

### Packaging

- 300ml jar
- 500g plastic jar
- 1kg plastic pail

### 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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