

Product Data

Silicone Rubber for Mold Making TSE3402, TSE3466

TSE3402, TSE3466 are a two-component, addition cure liquid silicone rubbers designed for mold making. These products cure at room temperature to a high strength, high hardness elastic rubber with the addition of curing agents.

KEY FEATURES

- ◆ Excellent dimensional stability
- ◆ Excellent release characteristics
- ◆ Low shrinkage (room temperature cure)
- ◆ High strength

APPLICATIONS

- ◆ Arts, crafts, architecture interiors and in the fabrication of buttons.

TYPICAL PROPERTY DATA

| UNCURED PROPERTIES | | | |
|--------------------------------|----------------------------|-------------|-------------|
| BASE COMPOUND | | TSE3402(A) | TSE3466(A) |
| Appearance | | Light blue | Translucent |
| Viscosity (23°C) | Pa·s {P} | 130 {1,300} | 55{550} |
| CURING AGENT | | TSE3402(B) | TSE3466(B) |
| Appearance | | Blue | Transparent |
| Viscosity (23°C) | Pa·s {P} | 1.2 {12} | 0.3 {3} |
| Mix ratio | wt % | 10 | 10 |
| Work life (25°C) | h | 2.0 | 1.5 |
| Demold time (25°C) | h | 24 | 24 |
| CURED PROPERTIES* (72h @ 23°C) | | | |
| Appearance | | Light blue | Translucent |
| Density (23°C) | g/cm ³ | 1.25 | 1.10 |
| Hardness (Type A) | | 60 | 60 |
| Tensile strength | MPa {kgf/cm ² } | 5.4 {55} | 7.4 {75} |
| Elongation | % | 220 | 350 |
| Tear strength (Crescent) | N/mm {kgf/cm} | 17 {17} | 16 {16} |
| Linear shrinkage (23°C, 24h) | % | < 0.1 | < 0.1 |
| Linear shrinkage (23°C, 72h) | % | < 0.1 | < 0.1 |

* JIS K 6249

Typical property data values should not be used as specifications.

APPLICATION INSTRUCTIONS

- ◆ **Mixing:** Select a mixing container 4-5 times larger than the volume of silicone rubber compound to be used. Weigh out silicone rubber base and the appropriate amount of catalyst. With clean tools, thoroughly mix them, scraping the sides and the bottom of the container carefully to produce a homogenous mixture.
- ◆ **Deaeration:** Air entrapped during mixing should be removed to eliminate voids in the cured rubber. Expose the mixed material to a vacuum of about 20mm of mercury. The material will expand, crest, and recede to about the original level as the bubbles break. Degassing is usually complete about two minutes after frothing ceases.
- ◆ **Curing:** These products will cure sufficiently in 24 hours at 25°C. To achieve faster cure speeds, elevated temperatures may be used.

Note: Certain materials containing water, sulfur, amine, organometallic compounds or phosphorus compounds, such as condensation cure silicone rubbers, clays, wood resins, synthetic rubbers, adhesive tapes, waxes and paints can cause cure inhibition. It is recommended that a preliminary test be performed to determine the compatibility

HANDLING AND SAFETY

- ◆ Wear eye protection and protective gloves as required while handling the product.
- ◆ Use the product in a well ventilated area.

STORAGE

- ◆ Store in a cool dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

PACKAGING

TSE3402(A)

- ◆ 1kg can available in cases of 10
- ◆ 18kg pail available

TSE3402(B)

- ◆ 100g bottle available in cases of 20
- ◆ 600g bottles available in cases of 10

TSE3466(A)

- ◆ 1kg can available in cases of 10
- ◆ 20kg pail available
- ◆ 180kg drum available

TSE3466(B)

- ◆ 100g bottle available in cases of 20
- ◆ 1kg can available in cases of 10
- ◆ 18kg pail available

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FOR INDUSTRIAL USE ONLY

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