

## TSE3032

TSE3032 is a two-component, low viscosity, transparent silicone rubber designed for electrical and electronic potting. The product cures at room temperature or by low temperature heat to transparent elastic rubber with the addition of curing agents.

### Key Features and Typical Benefits

- Low viscosity permits excellent potting
- Transparent appearance
- Cure rate can be accelerated by heat
- No reactive by-products: no concerns regarding corrosion
- Excellent resistance to temperature extremes

### Applications

- Potting of electronics parts requiring resistance to temperature extremes
- Potting of high voltage parts
- Moistureproof coating of electronic circuit boards
- Potting of various modules

### Typical Physical Properties

(JIS K 6249)

| Uncured Properties              |                   | TSE3032(A)         | TSE3032(B) |
|---------------------------------|-------------------|--------------------|------------|
| Appearance                      |                   | Transparent liquid |            |
| Viscosity (23 °C)               | Pa*s{P}           | 4.2 {42}           | 0.7{7}     |
| Mix ratio by weight             |                   | 100: 10            |            |
| Viscosity after mixing (23 °C)  | Pa*s{P}           | 4.0 {40}           |            |
| Work life* (23 °C)              | h                 | 4                  |            |
| Cured Properties (1h at 100 °C) |                   |                    |            |
| Appearance                      |                   | Elastic rubber     |            |
| Density (23 °C)                 | g/cm <sup>3</sup> | 1.02               |            |

|  |                            |   |
|--|----------------------------|---|
| Hardness (Type A)                                |                            | 35  |
| Tensile strength                                 | MPa {kgf/cm <sup>2</sup> } | 4.5{46}   |
| Elongation                                       | %                          | 210   |
| Refractive index (n <sub>D</sub> <sup>25</sup> ) |                            | 1.406   |
| Linear expansion*                                | 1/K                        | 2.3 x 10 <sup>-4</sup>                          |
| Thermal conductivity*                            | W/(m•K)                    | 0.17  |
| Volume resistivity                               | MΩ•m {Ω•cm}                | 2.0 x 10 <sup>7</sup> {2.0 x 10 <sup>15</sup> } |
| Dielectric strength                              | kV/mm                      | 21  |
| Dielectric constant (60Hz)                       |                            | 2.8   |
| Dissipation factor (60Hz)                        |                            | 0.001   |

\*In-house test method Typical physical properties are average data and should not be used as or to develop product specifications.

### Curing Properties

| Temperature<br>°C | Time<br>h |
|-------------------|-----------|
| 70                | 4         |
| 100               | 1         |
| 150               | 0.25      |

### General Instructions for Use

- All parts should be as clean and dry as possible prior to application.
- Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. A sample patch should always be conducted before proceeding to determine compatibility.
- TSE3032(B) generates flammable gas on contact with acids, bases or oxidizing materials.
- Wear eye protection and protective gloves at all times when working with this 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**

- TSE3032(A): 1kg can available in cases of 10, 15kg pail available
- TSE3032(B): 100g bottle available in cases of 20, 500g bottle available in cases of 10, 15kg can available

### **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

### **Product Safety, Handling and Storage**

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

### **Limitations**

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

### **Contact Information**

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