

## SilTRUST™ TSE3664K SILICONE POTTING MATERIAL

### Description

SilTRUST TSE3664K is a two-component condensation cure silicone rubber designed for electric potting. TSE3664 K cures at room temperature to form an elastic flame retardant rubber and adheres various types of materials such as metal, plastics, glass and ceramics without the use of primers.

### Key Features and Benefits

- flame retardant: UL94V-0 recognized (File No. E56745)
- low viscosity allows for excellent flowability
- fast cure
- excellent deep section cure
- excellent adhesive properties: primerless adhesion to many types of substrates
- no cure inhibition

### Typical Physical Properties

Typical Physical Properties (JIS K 6249)		
Uncured Properties (23°C, 50%RH)	TSE3664K(A)	TSE3664K(B)
Appearance	Gray	Blue
Specific Gravity	1.41	1.08
Viscosity Pa•s	4.0	0.01
Mixing Ratio by Weight	100:7.5	
Mix Ratio by Volume	100:10	
Viscosity after Mixing Pa•s	3.0	
Pot Life h	0.1	
Tack Free Time min	20	
Cured Properties (3 days @ 23°C, 50%RH)		
Appearance	Elastic rubber, Gray	
Density g/cm <sup>3</sup>	1.41	
Hardness (Type A)	60	
Tensile Strength MPa	3.0	
Elongation %	70	
Adhesive Strength (GL lap share) MPa	1.0	

Volume Resistivity $\Omega \cdot m$	5.0 x 10 <sup>15</sup>
Dielectric Strength kV/mm	26
Dielectric Constant (60Hz)	3.1
Dissipation Factor (60Hz)	0.01
Thermal Conductivity(1) W/m•K	0.4

1) In-house test method

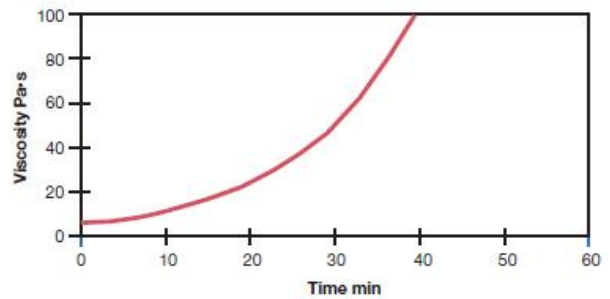
Typical property data values should not be used as specifications.

**Adhesion Capability**

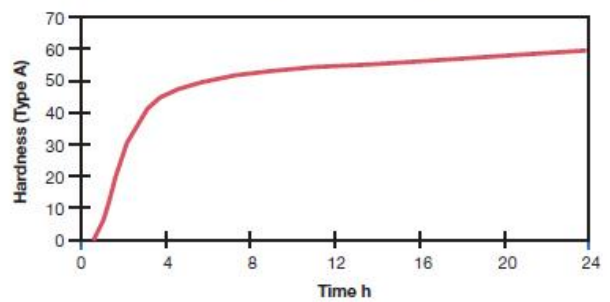
Aluminum	O
Stainles Steel	O
Copper	O
Polyester	O
Epoxy Resin	O
Polycarbonate	O
Acrylic Resin	X
ABS	X
PBT (Polybutylene terephtharate)	X
PPS (Polyphenylene sulfide)	X
PET (Polyethylene terephtharate)	X
Noryl (PPO=Polyphenylene oxide)	O
Phenolic Resin	O
Nylon-6	X
Nylon-66	X
Glass	O
PVC (Polyvinylchloride)	X
Steel	O
PP (Polypropylene)	X
PE (Polyethylene)	X

O: Excellent (Cohesive failure)    X: Poor (Adhesive failure)

**Cure Property: Viscosity (23°C, 50%RH)**



**Cure Property: Hardness (23°C, 50%RH)**



**Potential Applications**

- potting of electric and communications parts
- moisture proof sealing of meters
- moisture proof coating of electric circuit boards

**Processing Recommendations**

**Mixing**

In case of filler sedimentation of (A) component during storage, mix it homogeneously before using. Select a mixing container 4-5 times larger than the volume of silicone rubber compound to be used. Weight out (A) and (B) with clean tools, thoroughly mix them, scraping the sides and the bottom of the container carefully to produce a homogenous mixture.

### **Deaeration and Curing**

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. Pour the material in the part, and leave it with the room temperature.

### **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**

For product prices, availability, or order placement, contact our customer service at [Momentive.com/CustomerService/](http://Momentive.com/CustomerService/)

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

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