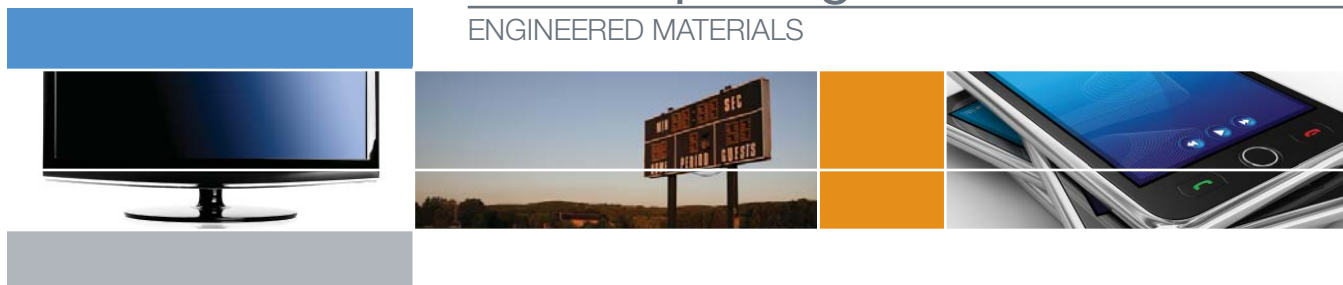


# TSE3331K

## silicone potting rubber

ENGINEERED MATERIALS



TSE3331K is a two-component, heat curable silicone potting rubber designed for flame retardant applications. This product has excellent flowability and adheres well to most substrates without the use of a primer.

### Key Features and Typical Benefits

- flame retardant: UL94V-0 recognized (File No: E56745)
- convenient 1:1 mix ratio by weight
- low viscosity: pours easily, penetrates complex assemblies
- excellent adhesive properties: primerless adhesion to many types of substrates
- less filler sedimentation
- good thermal conductivity
- non-corrosive to metals
- excellent heat and cold resistance: Rubber elasticity and adhesion are maintained over a wide temperature range: -55~ to +200°C

### Typical Physical Properties (JIS K 6249)

UNCURED PROPERTIES		TSE3331K(A)	TSE3331K(B)
Appearance		Black	White
Viscosity (23°C)	Pa•s {P}	3.2 {32}	2.9 {29}
Mixing Ratio by Weight		1:1	
Viscosity after Mixing (23°C)	Pa•s {P}	2.6 {26}	
Work Life (23°C)	h	8	
CURED PROPERTIES (1h @ 120°C)			
Appearance		Black, elastic rubber	
Density (23°C)	g/cm <sup>3</sup>	1.43	
Hardness (Type A)		45	
Tensile Strength	MPa {kgf/cm <sup>2</sup> }	3.1 {32}	
Elongation		120	
Adhesive Strength <sup>(1)</sup>	MPa {kgf/cm <sup>2</sup> }	1.6 {16}	
Linear Expansion <sup>(2)</sup>	1/K	1.9x10 <sup>-4</sup>	
Thermal Conductivity <sup>(2)</sup>	W/m•K	0.53	
Volume Resistivity	Ω•cm	6.0x10 <sup>14</sup>	
Dielectric Strength		22	
Dielectric Constant (60Hz)		3.1	
Dissipation Factor (60Hz)		0.015	

(1) Aluminum Lap Shear

(2) In-house test method

Typical property data values should not be used as specifications.

# TSE3331K silicone potting rubber

## Potential Applications

- potting of electronic parts requiring flammability and use under temperature extremes
- potting of high voltage parts
- moisture proof coating of electronic circuit boards

## Adhesion Capability

### *Suitable substrates*

Metals: Aluminum, Copper, Ni plate, Stainless steel  
Plastics: PPS, PBT, Epoxy resin, Polyester, Phenolic resin  
Rubber: Heat cured silicone rubber  
Inorganics: Glass, Ceramics

### *Not suitable substrates*

Plastics: PP, PE, Fluorocarbon resin  
Rubbers: Silicone RTV, Sulfur vulcanized rubbers,  
Fluorocarbon rubber

## Instructions for Use

1. (A) and (B) each should be thoroughly stirred before mixing together, because filler sedimentation may occur during storage.
2. Weigh out (A) and (B) to the clean container 5 times larger than the volume of silicone compound to be used.
3. Mix (A) and (B) thoroughly with clean tools.
4. Deaerate the mixture for 5 to 10 minutes to remove air entrapped during mixing.
5. Apply and cure with heat

*Note:* All parts should be as clean and dry as possible prior to applications. Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. 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.
- adequate ventilation must be maintained in the work place at times.

## Storage

- store in a cool dry place out of direct sunlight.
- keep out of the reach of children.

## Packaging

### TSE3331K(A)

- 1kg can available in cases of 10
- 5kg can available in cases of 2

### TSE3331K(B)

- 1kg can available in cases of 10
- 5kg can available in cases of 2

# TSE3331K silicone potting rubber

## 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 considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials products 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.

## Emergency Service

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Momentive Performance Materials maintains an around-the-clock emergency service for its products.

<u>Location</u>	<u>Emergency Service Provider</u>	<u>Emergency Contact Number</u>
Mainland U.S., Puerto Rico	CHEMTREC	1-800-424-9300
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Middle East	NCEC	+44 (0) 1235239671
Asia Pacific (except China)	NCEC	+44 (0) 1235239670
China	NCEC	+86-10-5100-3039
Latin America (except Brazil)	NCEC	+44 (0) 1235239670
Brazil	SOS Cotec	08000111767 or 08007071767
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At sea	Radio U.S. Coast Guard in U.S. waters NCEC in International waters	+44 (0) 1235239670

For Health related calls, contact Momentive Performance Materials at +1-518-233-2500 (English only).

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DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

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