

SILTRUST™ TSE3062 SILICONE POTTING GEL

Description

SILTRUST TSE3062 is a two-component, low viscosity silicone gel designed for electronics potting applications. This product cures at room temperature to a soft, tacky gel with the addition of curing agent. The cure time can be accelerated with heat. The soft nature and cushioning effect of this product provides excellent protection for electronic assemblies from external humidity, mechanical shock and vibration.

Key Features and Typical Benefits

- Convenient 1:1 mix ratio by weight
- Low viscosity - easily pourable
- Room temperature curable and heat accelerated cure
- Soft, tacky gel
- Absorbs shock and protects delicate mechanical components from vibration
- No reactive by-products; non corrosive
- Excellent electrical properties
- Excellent resistance to temperature extremes

Typical Physical Properties

Uncured Properties		TSE3062 (A)	TSE3062 (B)
Appearance		Transparent	
Viscosity (23 °C)	Pa·s	1.0	1.0
After mixing	Pa·s	1.0	
Mix ratio by weight		1:1	
Work life (23 °C)	h	1	
Density	g/cm³	0.97	
Cured Properties (0.5h at 70 °C)			

Appearance		Gel
Penetration		55
Volume resistivity	$\Omega \cdot \text{cm}$	1.0×10^{15}
Dielectric strength	kV/mm	18
Dielectric constant (60Hz)		2.7
Dielectric loss (60Hz)		0.001
Volume expansion	1/K	1×10^{-3}
Thermal conductivity	W/m·K	0.17

Typical physical properties are average data and should not be used as or to develop product specifications.

Potential Applications

- Electrical and electronic potting such as hybrid IC and power module
- Potting of high voltage parts

Processing Recommendations

Materials such as water, sulphur, 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. All parts should be clean and dry prior to applications.

Availability

TSE3062 is available as 2kg, 36kg, and 360kg kits.

General Considerations for Use

While the typical operating temperature for silicone materials ranges from -45°C to 175°C , the long-term maintenance of its initial properties is dependent upon design related stress considerations, substrate materials, frequency of thermal cycles, and other factors.

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 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.

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