

SILTRUST™ TSE3053 SILICONE POTTING GEL

Description

SILTRUST TSE3053 is a one-component, low viscosity silicone gel designed for electronic potting applications. This product cures with heat in a short period of time to a soft, tacky gel. The soft nature and cushioning effect of this product provides protection of electronic assemblies from external humidity, mechanical shock and vibration.

Key Features and Typical Benefits

- Easy to use - one component, no mixing required
- Low viscosity - easily pourable, penetrate complex assemblies
- Fast heat cure system and heat accelerated cure
- Absorbs shock and protects delicate mechanical components from vibration
- No reactive by-products; no concerns regarding corrosion
- Good electrical properties
- Resistance to temperature extremes

Typical Physical Properties

<u>Property</u>	<u>Unit</u>	<u>Value</u>
Uncured Properties		
Appearance		Transparent, liquid
Viscosity (23 °C)	Pa·s {P}	0.7 {7}
Specific Gravity (23 °C)		0.97
Cured Properties (2hr at 125 °C)		

Appearance		Transparent, gel
Penetration		105
Volume Resistivity	$M \cdot \Omega \{ \Omega \cdot cm \}$	$1.0 \times 10^7 \{ 1.0 \times 10^{15} \}$
Dielectric Strength	kV/mm	18
Dielectric constant (60Hz)		2.8
Dissipation Factor (60Hz)		0.001
Volume Expansion	1/K	1.0×10^3
Thermal Conductivity	$W/(m \cdot K) \{ cal/(cm \cdot s \cdot ^\circ C) \}$	$0.17 \{ 4.1 \times 10^{-4} \}$

Typical 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 insulating potting
- Power devices such a power module potting
- Mechanical cushioning and vibration damping material for delicate assemblies

General Instructions for Use and Storage

- 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
- All parts should be as clean and dry as possible prior to applications
- Wear eye protection and protective gloves at all times when working with this product
- Maintain adequate ventilation in the work place at all times
- Store at a coll temperatures (0~10 °C) to prevent an increase in viscosity
- When returning to room temperature, allow the contents to return to room temperatures before opening the container to avoid condensation
- Keep out of the reach of children

Packaging

- 1kg can available in case of 10
- 15kg can available by the can

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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