

SilTRUST* TSE3660 Potting

Liquid Silicone Rubber for Potting

Description

SilTRUST TSE3660 is a two-component condensation cure silicone rubber designed for electric potting. SilTRUST TSE3660 potting cures at room temperature to form an elastic rubber and adheres to various types of materials such as metal, plastics, glass and ceramics without the use of primers.

TSE3660(A)/(B) : General grade (TFT: 15min)

TSE3660(A)/(C) : Fast cure grade (TFT: 10min)

Key Features and Typical Benefits

- Low viscosity allows for excellent flowability
- Fast cure and excellent deep section cure
- Excellent adhesive properties: primerless adhesion to many types of substrates
- No cure inhibition
- Flame retardant: UL94HB recognized (File No.E56745) : TSE3660(A)/(B)

Typical Physical Properties

(JIS K 6249)

Property	Unit	Value			
		TSE3660(A)	TSE3660(B)	TSE3660(A)	TSE3660(C)
Uncured Properties (23 °C, 50%RH)					
Appearance		White	Blue-Green	White	Blue-Green
Specific Gravity		1.27	1.02	1.27	1.02
Viscosity	Pa·s	3.1	0.01	3.1	0.01
Mixing ratio by weight		100 : 8		100 : 8	

Mixing ratio by volume		100 : 10	100 : 10
Pot Life	h	0.1	0.1
Tack-Free time	min	15	10

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

Typical Physical Properties, continued

<u>Property</u>	<u>Unit</u>	<u>Value</u>	
Cure Properties (3 days at 23 °C, 50%RH)			
Appearance		Elastic rubber, Blue-Green	Elastic rubber, Blue-Green
Density	g/cm ³	1.27	1.27
Hardness (Type A)		31	33
Tensile Strength	MPa	1.0	1.1
Elongation	%	100	100
Adhesive Strength ⁽¹⁾	MPa	0.5	0.6
Volume Resistivity	Ω·cm	1.2 x 10 ¹⁵	
Dielectric Strength	kV/mm	26	
Dielectric Constant (60Hz)		3.4	
Dissipation Factor (60Hz)		0.02	

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

⁽¹⁾Aluminum lap shear

Potential Applications

- Potting of electric and communications parts

Adhesion Capability

<u>Substrate</u>	
Aluminum	O
Stainless Steel	O
Copper	O
Polyester	O
Epoxy Resin	O
Polycarbonate	O
Acrylic Resin	O
ABS	O
PBT (Polybutylene terephthalate)	O
PPS (Polyphenylene sulfide)	O
PET (Polyethylene terephthalate)	O
Noryl (PPO = Polyphenylene oxide)	O
Phenolic Resin	O
Nylon-6	O
Nylon-66	O
Glass	O
PVC (Polyvinylchloride)	O
Steel	O

Note: Test results. Actual data may vary

O: Excellent (Cohesive failure)

General Instruction for Use**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)/(B) or (A)/(C) with clean tools, thoroughly mix them, scraping the sides and the bottom of the container carefully to produce a homogeneous 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 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/

For literature and technical assistance, visit our website at: www.momentive.com

DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

*SiTRUST is a trademark of Momentive Performance Materials Inc.

Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.