Product Data

Liquid Silicone Rubber For Potting

TSE350

TSE350 is a two-component, condensation cure liquid silicone rubber designed for electric potting and encapsulation. The product cures at room temperature to an elastic rubber with the addition of a curing agent,

KEY FEATURES

- Low viscosity: excellent flowability
- Cures at room temperature
- Excellent heat and cold resistance
- Excellent electrical insulation properties
- Many types of curing agents available

APPLICATIONS

- Potting and encapsulation of electronic parts

TYPICAL PROPERTY DATA

(JIS K 6249)

UNCURED PROPERTIES		
Appearance		Light gray
Viscosity (23°C)	Pa·s {P}	12 {120}
Curing agent		CE61
Mixing ratio	wt %	0.5
Viscosity after mixing (23°C)	Pa·s {P}	10.0 {100}
Pot life (23°C)	h	1.0
CURED PROPERTIES (3days @ 23°C)		
Appearance		Elastic rubber, Light gray
Density (23°C)	g/cm^3	1.18
Hardness (Type A)		47
Tensile strength	MPa {kgf/cm^2}	2.5 {25}
Elongation	%	170
Volume resistivity	MΩ·m {Ω·cm}	1.0×10^6 {1.0×10^{14}}
Dielectric strength	kV/mm	22
Dielectric constant (60 Hz)		3.1
Dissipation factor (60 Hz)		1.18

Typical property data values should not be used as specifications.

CURING AGENTS

GRADE	APPEARANCE	FEATURE	MIXING RATIO WT %	POT LIFE (25°C) min	CURE TIME (25°C) h
CE60	Red	Fast cure	0.5	6	1
CE601	Transparent				
CE61	Brown	General	0.5	60	24
CE611	Transparent				
CE62	Red	Deep section cure	0.5	60	24
CE621	Transparent				
YC6805	Brown	*1	0.5	60	24
YC6814	Light yellow	Deep section cure	1.0	15	10

*1: Contains an inhibitor to prevent copper corrosion

GENERAL INSTRUCTIONS FOR USE

- **Mixing**

  Select a mixing container 4-5 times larger than the volume of silicone rubber compound to be used. Weight out silicone rubber base and the appropriate amount of catalyst. 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.

ADHESION

- Use primer to improve adhesion with the part. Use ME121 for the metals, ME123 for the plastics.
- Do a confirmation examination in advance because adhesion varies in the quality of the material, the surface condition.

HANDLING AND SAFETY

- Wear eye protection and protective gloves as required while handling the product.
- Maintain adequate ventilation in the work place at all times.

STORAGE

- Store in a dry and cool place out of direct sunlight.
- Keep out of the reach of children.

PACKAGING

- TSE350: 1kg can available in case of 10, 20kg pail available
- CE60: 10g bottle available in case of 100, 100g bottle available in case of 20
- CE601: 10g bottle available in case of 100, 100g bottle available in case of 20
- CE61: 10g bottle available in case of 100, 100g bottle available in case of 20
- CE611: 10g bottle available in case of 100, 100g bottle available in case of 20, 1kg can available in case of 10
- CE62: 10g bottle available in case of 100, 100g bottle available in case of 20
- CE621: 10g bottle available in case of 100, 100g bottle available in case of 20
- YC6805: 10g bottle available in case of 100
- YC6814: 10g bottle available in case of 100, 100g bottle available in case of 20, 1kg bottle available in case of 10

Issued Sep. 2003, TSE350 E

FOR INDUSTRIAL USE ONLY

It is the responsibility of the user to determine the suitability of any Momentive Performance Materials Japan product for any intended application. NEVER USE ANY MOMENTIVE PERFORMANCE MATERIALS JAPAN PRODUCT FOR IMPLANTATION OR INJECTION INTO THE HUMAN BODY. Specifications are available by contacting Momentive Performance Materials Japan. Typical property data values should not be used as specifications. Inasmuch as Momentive Performance Materials Japan LLC has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the suitability of the material for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any Momentive Performance Materials Japan patent covering use or as recommendations for use of such materials in the infringement of any patent. Material Safety Data Sheets are available upon request from Momentive Performance Materials Japan. The contents of this catalog are subject to change without notice. No part of this data may be reproduced without the prior approval of Momentive Performance Materials Japan.

MOMENTIVE
performance materials

Momentive Performance Materials Japan LLC
http://www.momentive.com

Technical Answer Center (Japan): Phone: +81-276-20-6182 FAX: +81-276-31-6259
Tokyo Head Office: Phone: +81-3-5544-3111 FAX: +81-3-5544-3122