

TSE3940

Flame Retardant Silicone Adhesive Sealant

Product Description TSE3940 is a one-component, fast curing silicone adhesive sealant that cures on exposure to atmospheric moisture to form an elastic, flame retardant silicone rubber. TSE3940 has excellent corrosion-free adhesion to metals, including copper, plastics, ceramics, glass, etc without the use of primers.

Key Performance Properties

- Flame retardant; meets UL94V-0 (File No:56745)
- Non-corrosive to metals; meets MIL-A-46146B corrosion test
- Fast cure
- Low odour cure; releases an alcohol vapour during cure
- Primerless adhesion to many substrates
- Excellent high and low temperature resistance; from -55°C to 200°C
- Excellent weatherability, ozone, and chemical resistance
- Excellent dielectrical properties
- Simple and easy-to-use one-component system

Applications

- Flame retardant adhesive for high voltage parts.
- Sealing of electrical and industrial applications required flame retardency.
- Connection sealing on electronic parts assemblies.
- Waterproof sealant for electrical, electronic and communication equipment.

Typical Product Data

Typical uncured Properties	
Appearance	grey, paste
Tack-free Time (23° C) min	5
Corrosion MIL.A-46146B	None
Typical cured Properties (7 days@20°C/50%RH)	
Density, g/cm ³	1.49
Hardness, Shore A	40
Tensile strength, MPa	2.9
Elongation, %	200
Adhesive strength, MPa	1.6 (Alu. lap-shear)
Thermal conductivity, W/mK	0.41

Electrical Properties (cured)	
Volume resistivity , ohm.cm	6x10 ¹⁴
Dielectric strength, kV/mm	21
Dielectric constant (60 Hz)	4.5
Dielectric loss	0.05

Specifications Typical product data values should not be used as specification. Assistance and specification are available by contacting Momentive performance materials Technical Service.

Instruction for use Surface Preparation

Insure that surfaces to be sealed, coated or bonded are clean and free of grease, lubricating oils, release agents and dirt. To optimize fast cure and good adhesion, substrates must be thoroughly dry of cleaning solvents before applying the RTV. The RTV should be applied to one surface only. Wipe away excess uncured material with a clean cloth. After curing, removal of material is more difficult.

Bonding

These products offer primerless adhesion to may substrates including most plastics. Maximum adhesion is obtained 72 hours after full cure is obtained (2 mm thick specimen to an aluminium substrate).

Curing

These products cure at room temperature reacting with atmospheric moisture. Whenever possible, 25°C and 50 % relative humidity should be provided. Higher temperature and humidity will cause faster cure while lower temperature and lower humidity will slow the cure considerably. These products cure from the outside (outer skin) inward, therefore, cure rate is also dependent on the thickness of the material. It ist not recommended to apply material thicker than 6 mm.

Handling and Safety

Material Safety Data Sheets are available upon request from Momentive performance materials. Similar information for solvents and other chemicals used with the Momentive performance materials products should be obtained from your supplier. When solvents are used, proper safety precautions must be observed.

Storage and Warranty Period

The shelf life will be indicated by the 'use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers below 25°C.

Availability

TSE3940 is available in 150g tubes and 333 ml cartridges



PRINCIPAL LOCATIONS – Regional Information

North America	World Headquarters 187 Danbury Road Wilton, CT 06897, USA	T 800.295.2392	F 607.754.7517
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CUSTOMER SERVICE CENTERS

North America	Charleston, WV 25314, USA E cs-na.silicones@momentive.com		
	• Specialty Fluids	T 800.523.5862	F 304.746.1654
	• UA, Silanes, Resins, and Specialties	T 800.334.4674	F 304.746.1623
	• RTV Products-Elastomers	T 800.332.3390	F 304.746.1623
	• Sealants and Adhesives & Construction	T 877.943.7325	F 304.746.1654
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