

TSE3941

Flame Retardant Silicone Adhesive Sealant

Product Description **TSE3941** is a one-component, fast curing silicone adhesive sealant that cures on exposure to atmospheric moisture to form an elastic, flame retardant silicone rubber. TSE3941 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-1 (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 dielectric properties
- Simple and easy-to-use one-component system

Applications

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

Typical Product Data

Typical uncured Properties		
Appearance		White, 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	1.65
Hardness	Shore A	60
Tensile strength	MPa	2.9
Elongation	%	100
Adhesive strength(Alu lap-shear)	MPa	1.4
Thermal conductivity,	W/mK	0.83

Electrical Properties		
Volume resistivity	ohm·cm	4x10 ¹⁴
Dielectric strength	kV/mm	22
Dielectric constant (60 Hz)		4.0
Dielectric loss (60 Hz)		0.04

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

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

Curing

This product 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.

This product cure from the outside (outer skin) inward, therefore, cure rate is also dependent on the thickness of the material. It is 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 TSE3941 is available in 150 gram tubes, 333 ml cartridges and in 20 kg pails.



PRINCIPAL LOCATIONS – Regional Information

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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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