



# TSE3854D

## TSE3854D

### Description

TSE3854D is a one-component silicone adhesive, which cures on exposure to atmospheric moisture to form a flame retardant silicone rubber. The product offers excellent corrosion-free adhesion to metals, including copper, plastics, ceramics, glass, etc without the use of primers.

### Key Features and Benefits

#### PRODUCT FEATURES

- Flame retardant: certified UL94 V-0 => 3854D-G: 0.8 mm 3854D-W: 1.5 mm (UL file No. E56745)
- Non-corrosive to metals: meets MIL-A-46146B corrosion tests
- One component: easy to use
- Low odour cure: releases an alcohol vapour during cure
- Outstanding electrical properties
- Primerless adhesion to many substrates

### Applications

Flame retardant adhesive sealant for TV parts and CRT, house appliances, communication equipment, instruments and gauges Moisture proof, waterproof, electrical insulation, vibration proof adhesive sealant for hybrid integrated circuits, sensors, high voltage electronic assemblies, printed circuit boards etc. General adhesion for metal, glass, plastics etc

### Typical Physical Properties

Uncured Properties	
Cure System	Alkoxy
Colour	Grey/White
Consistency	Thixotropic Paste
Tack Free Time, minutes	15
Cured Properties	
Specific Gravity, g/cm <sup>3</sup>	1.32
Hardness (Type A)	40
Tensile Strength, MPa	2.7
Elongation, %	260
Shear Strength Alu/Alu, MPa	2.2
Thermal Conductivity, W/(m.K)	0.34
Dielectric Strength, kV/mm	25
Dielectric Constant (60 Hz)	3.1
Dissipation Factor (60 Hz)	0.02
Volume Resistivity, ohm.cm	2.5x10 <sup>14</sup>

### Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a 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

The shelf life will be indicated by the 'use before date' on the associated documents with a minimum of 6 months when stored in the original unopened containers below 27 °C.

Customers should review the latest Material Safety Data Sheet (MSDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, and any special storage conditions required for safety. MSDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any Momentive Performance Materials (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.

## Processing Recommendations

### 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 adhesive/ sealant. The adhesive/ sealant 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 offers 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 aluminum substrate).

### Curing

This product cures 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 cures while lower temperatures and lower humidity will slow the cure considerably. This product cures 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 6mm.

## Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

## Availability

TSE3854D-W is available in 130 gram tubes and in 333ml cartridges. TSE3854D-G is available in 130 and 230 gram tubes and in 20 kg pails

### Contact Information

For product prices, availability, or order placement, contact our customer service by visiting [momentive.com/ContactSilicones](http://momentive.com/ContactSilicones).

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

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