

TSE3941W

Description

TSE3941-W is a one-component, non-corrosive, low volatile silicone adhesive sealant that cures on exposure to atmospheric moisture to form an elastic and flame retardant silicone rubber.

Key Features and Typical Benefits

- Fast tack-free time
- Flame retardant: UL94V-0 recognized (File No: E56745)
- Low volatility
- Excellent adhesion to many substrates
- Non-corrosive to metals
- Low odor cure: releases an alcohol vapor during cure

Typical Physical Properties

(JIS K 6249)

Property	Unit	Value
Uncured Properties		
Appearance		Non-flowable paste, white
Tack-Free Time (23 °C)	min	5
Cured Properties (3 days at 23 °C, 50% RH)		
Appearance		White rubber
Density	g/cm ³	1.71
Hardness (Type A)		76
Tensile Strength	MPa {kgf/cm ² }	4.2 {43}
Elongation	%	80
Adhesion Strength ⁽¹⁾	MPa {kgf/cm ² }	2.0 {20}
Volatile Siloxane ⁽²⁾	wt%	0.005
Thermal Conductivity ⁽²⁾	W/(m·K) {cal/(cm·s·°C)}	0.7 {1.7 x 10 ⁻³ }

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

(1)Aluminum lap shear (2)In-house test method

Electrical Properties (Cure condition: 3 days at 23 °C, 50% RH)

Condition	Volume Resistivity $\Omega \cdot \text{cm}$	Dielectric Strength kV/mm	Dielectric Constant (60 Hz)	Dielectric Loss (60 Hz)
Initial	2.3×10^{15}	21	4	0.04
500h at 150 °C	7.2×10^{15}	23	-	-
1000h at 150 °C	6.3×10^{15}	21	-	-
500h at 60 °C, 90%RH	2.1×10^{15}	22	-	-
16h in water	1.2×10^{15}	20	-	-

Note: Test results. Actual results may vary.

ADHESION PERFORMANCE

SUBSTRATE	NON PRIMER
Aluminum	○
Copper	○
Phenolic resin	○
Epoxy resin	○
PET	○
ABS resin	○
Polyamide	○
Polyphenylene ether	○
Polycarbonate	○*
Polyethylene	×
Polytetrafluoroethylene	×
Glass	○

○: Excellent (Cohesive failure) ×: Poor (Adhesive failure)

* It shows good adhesion but solvent crack may occur depending on the application. A preliminary adhesion test is recommended to confirm.

Note: Test results. Actual results may vary.

Heat Resistance (150 °C)**Lap Shear Adhesion Strength****(unit: MPa)**

Substrate	Initial	168h	500h
Copper	2.1	1.9	1.6
Epoxy Resin	2.3	2.0	2.1
PET	1.9	1.7	1.7

Note: Test results. Actual results may vary.

Storage

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

Packaging

TSE3941W is currently available in:

- 150g tube available in cases of 20
- 333ml cartridge available in cases of 50 (5 boxes of 10 cartridges)

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.

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