

Product Data

Flame Retardant Adhesive Sealant TSE3853-W

TSE3853-W is a one-component silicone adhesive, which cures on exposure to atmospheric moisture at room temperature 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

- ◆ Flame retardant: UL94 V-0 recognized (File No. E56745)
- ◆ Non-corrosive to metals: meets MIL-A-46146B corrosion test
- ◆ One-component: easy-to-use
- ◆ Low odor cure: releases an alcohol vapor during cure
- ◆ Primerless adhesion to many substrates

APPLICATIONS

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

TYPICAL PROPERTY DATA

(JIS K 6249)

UNCURED PROPERTIES		
Appearance		White, semi-flowable
Viscosity (23°C)	Pa·s{P}	400 {4,000}
Tack-free time (23°C)	min	15
CURED PROPERTIES (7d @ 23°C, 50%RH)		
Appearance		White, elastic rubber
Density (23°C)	g/cm ³	1.31
Hardness (Type A)		34
Tensile strength	MPa {kgf/cm ² }	2.3 {23}
Elongation	%	270
Adhesive strength ^{*1}	MPa {kgf/cm ² }	1.3 {13}
Thermally conductivity ^{*2}	W/(m·K) {cal/(s·cm·°C)}	0.34 {8.0×10 ⁻⁴ }
Volume resistivity	MΩ·m {Ω·cm}	2.0×10 ⁶ {2.0×10 ¹⁴ }
Dielectric strength	kV/mm	20
Dielectric constant (60Hz)		3.1
Dissipation factor (60Hz)		0.02

*1 Aluminum lap shear

*2 In-house test method

Typical property data values should not be used as specifications.

ADHESION PERFORMANCE

TSE3853-W has excellent bonding properties and adheres to many materials without primers.

SUBSTRATE	ADHESIVENESS (WITHOUT PRIMER)
Aluminum	○
Stainless steel	×
Steel	○
Copper	△
Brass	○
Glass	○
Phenyl resin	○
Epoxy resin	○
Polyester	○
Polycarbonate	○
Rigid PVC	○
Polyethylene	×
ABS resin	○
Polyamide	○
Acrylic resin	△
PBT	○
PPO	○
PPS	○

○: Excellent (Cohesive failure) △: Not sufficient ×: Poor (Adhesive failure)

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 cool dry dark place out of direct sunlight.
- ◆ Keep out of the reach of children.

PAKAGING

- ◆ 130g tube available in case of 20
- ◆ 333ml cartridge available in case of 10
- ◆ 20kg pail available

FOR INDUSTRIAL USE ONLY

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