

Product Data

Flame Retardant Adhesive Sealant TSE3854DS

TSE3854DS 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: certified UL94 V-0 (UL 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
- ◆ Available in two colors: White and Gray

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		Non-flowable, paste like
Tack-free time (23°C)	min	15
CURED PROPERTIES (7days@23°C/50%RH)		
Appearance		Elastic rubber
Density (23°C)	g/cm ³	1.33
Hardness (Type A)		45
Tensile strength	MPa {kgf/cm ² }	3.0 {31}
Elongation	%	300
Adhesive strength ^{*1}	MPa {kgf/cm ² }	2.2 {22}
Thermal conductivity ^{*2}	W/(m·K) {cal/(cm·s·°C)}	0.34 {8.0×10 ⁻⁴ }
Volume resistivity	Ω·cm	2×10 ¹⁴
Dielectric strength	kV/mm	25
Dielectric constant (60Hz)		3.1
Dissipation factor (60Hz)		0.01

*1 Aluminum lap shear

*2 In-house test method

Typical property data values should not be used as specifications.

ADHESION PERFORMANCE

TSE3845DS has excellent bonding properties and adheres to many substrates without primers. However, for significantly better adhesion on difficult-to-bond substrates, use of a primer is suggested.

SUBSTRATE	WITHOUT PRIMER	PRIMER	
		ME121	ME123/YP9341
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)

* Do not use primer for polycarbonate due to possible cracks

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.

PACKAGING

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

COLORS

Two colors Available (Color suffix): White (W), Gray (G)

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