

## **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)

<b>UNCURED PROPERTIES</b>	
Appearance	Non-flowable, paste like
Tack-free time (23°C) min	15
<b>CURED PROPERTIES (7days@23°C/50%RH)</b>	
Appearance	Elastic rubber
Density (23°C) g/cm <sup>3</sup>	1.33
Hardness (Type A)	45
Tensile strength MPa {kgf/cm <sup>2</sup> }	3.0 {31}
Elongation %	300
Adhesive strength* <sup>1</sup> MPa {kgf/cm <sup>2</sup> }	2.2 {22}
Thermal conductivity* <sup>2</sup> W/(m·K) {cal/(cm·s·°C)}	0.34 {8.0×10 <sup>-4</sup> }
Volume resistivity Ω·cm	2×10 <sup>14</sup>
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)

Issued July 2008/1st revised Nov. 2008

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### **FOR INDUSTRIAL USE ONLY**

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