

Product Data

Flame Retardant Silicone Adhesive Sealant TSE384-B

TSE384-B is a one-component, oxime cure, silicone adhesive sealant for flame retardant application. TSE384-B cures at room temperature with moisture in the air and bonds to most materials, such as metals, plastics, ceramics and glass without the use of primers.

KEY FEATURES

- ◆ Flame retardant ; UL94V-0 (File No:E56745)
- ◆ Primerless adhesion to many substrates
- ◆ Neutral cure ; Little risk of corrosion
- ◆ Excellent high and low temperature resistance ; from -55°C to 200°C
- ◆ Excellent weatherability, ozone, and chemical resistance
- ◆ Excellent electrical insulation properties
- ◆ Simple and easy-to-use one-component system

APPLICATIONS

- ◆ Flame retardant adhesive for high voltage parts
- ◆ Sealing of electrical and industrial applications required flame retardency
- ◆ Connection sealing on electrical parts assemblies
- ◆ Waterproof sealant for electrical and communication equipment

TYPICAL PRODUCT DATA

TYPICAL UNCURED PROPERTIES		
Appearance		Thixotropic paste, Black
Tack-free time (23°C)	min	60
TYPICAL CURED PROPERTIES (7days @23°C / 50%RH)		
Appearance		Elastic rubber
Specific gravity		1.46
Hardness (Type A)		50
Tensile strength	MPa {kgf/cm ² }	2.9 {30}
Elongation	%	270
Adhesive strength*	MPa {kgf/cm ² }	1.4 {14}
Thermal conductivity	W/(m·K) {cal/(cm·s·°C)}	0.59 {1.4×10 ⁻³ }
ELECTRICAL PROPERTIES (CURED)		
Volume resistivity	MΩ·m {Ω·cm}	1×10 ⁷ {1×10 ¹⁵ }
Dielectric strength	kV/mm	22
Dielectric constant (60Hz)		4.0
Dissipation factor (60Hz)		0.016

* Aluminum Lap Shear

Typical property data values should not be used as specifications

ADHESION PERFORMANCE

TSE384-B has excellent bonding properties and adheres to many materials without primers. However, for significantly better adhesion on difficult-to-bond substrates, use of a primer is suggested. The following list of materials shows the quality of adherence of TSE3840-G used with ME121, ME123, YP9341 or without a primer.

SUBSTRATE	NO PRIMER	ME121	ME123 or YP9341
Metals			
Copper	△*	○□	
Steel	○	○	
Brass	△*	○□	
Stainless steel	○	○	
Pure aluminum	○	○	
Tin plate	○	○	
Zinc plate	△	△	
Plastics			
Acrylic resin	○		○
Phenolic resin	○		○
Epoxy resin	○		○
Rigid polyvinyl chloride	○		○
Polyester film	○		○
ABS resin	×		○
Polyethylene	×		×
Polytetrafluoroethylene	×		×
Inorganic materials			
Glass	○	○	
Ceramics	○	○	

Note

- : Excellent (Cohesive failure 100%)
- △ : Not sufficient
- × : Poor(Cohesive failure 0%)
- * : Corrosion may occur depending on the application

Do not apply to Polycarbonate due to solvent crack

HANDLING AND SAFETY

- ◆ Wear eye protection when handling uncured sealant as it can irritate eyes.
- ◆ In case of eye contact, immediately flush eyes well with water and contact a physician.
- ◆ Extended contact with the skin may cause irritation and should be avoided.
- ◆ This product releases methyl ethyl ketoxime vapors during cure. Adequate ventilation must be maintained in the work place at all times.

STORAGE

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

PACKAGING

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

TSE384-B E

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FOR INDUSTRIAL USE ONLY

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