

Non - Corrosive Silicone Adhesive Sealant

TSE385

TSE385 is a one-component, silicone elastomeric adhesive which cures at room temperature with moisture in the air. This product bonds to many substrates, such as metals, plastics, ceramics and glass without the use of a primer. This is an alcohol type product (titanium catalyst) which is non-corrosive to metals, including sensitive metals such as copper, and offers an essentially odorless cure with no unpleasant smell or pungent cure by-product.

KEY FEATURES

- ◆ Non-corrosive to metals ; meets MIL-A-46146B corrosion test
- ◆ Low odor
- ◆ Primerless adhesion to many substrates
- ◆ Excellent high and low temperature resistance ; from -55°C to 200°C approximately
- ◆ Excellent weatherability, ozone, and chemical resistance
- ◆ Excellent electrical insulation properties
- ◆ Simple and easy-to-use one-component system
- ◆ No solvent crack to Polycarbonate(PC)

APPLICATIONS

- ◆ Non-corrosive adhesives for Electric/Electronics parts assembly applications in Telecommunication, Auto-electronics, Home Appliances, Audio-TV Industries.
- ◆ A waterproof sealant for electrical, electronic and communication equipment
- ◆ General purpose adhesion for metals, glass, plastic, etc

TYPICAL PROPERTIES

TYPICAL UNCURED PROPERTIES		
Appearance		White paste
Tack-free Time	min. (23°C)	90
Corrosion	MIL-A-46146B	None
TYPICAL CURED PROPERTIES (7days @23°C / 50%RH)		
Appearance		White elastic rubber
Specific gravity		1.10
Hardness	(Type A Durometer)	35
Tensile strength	MPa {kgf/cm ² }	2.9 {30}
Elongation	%	390
Adhesive strength	MPa {kgf/cm ² }	2.0 {20}
Thermal conductivity	W/m·K {cal/cm·s·°C}	0.17 {4.2×10 ⁻⁴ }
Volume resistivity	MΩ·m {Ω·cm}	5×10 ⁷ {5×10 ¹⁵ }
Dielectric strength	kV/mm	22
Dielectric constant	(60Hz)	3.0
Dielectric loss	(60Hz)	0.001

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ADHESION PERFORMANCE

TSE385 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 TSE385 used both with ME121, ME123 and no primer.

SUBSTRATE	NO PRIMER	ME121	ME123
Metals			
Copper	○	○	
Steel	○	○	
Soft steel	○	○	
Brass	○	○	
Stainless steel	○	○	
Aluminum	○	○	
Corrosion-resistant aluminum	○	○	
Galvanized sheet iron	○	○	
Tin plate	○	○	
Plastics			
Acrylic resin	○	○	
Phenolic resin	○	○	
Epoxy resin	○	○	
Polycarbonate(PC)	○	○	
Soft polyvinyl chloride	△	△	○
Rigid polyvinyl chloride	○	○	○
Polyester film	○	○	○
Unsaturated polyester	○	○	
Polyimide	○	○	
ABS resin	○	○	
Polypropylene	×	×	×
Fluoride resin	×	×	×
Silicone varnish laminate	○	○	
Silicone varnish coated glass cloth	○	○	
Rubbers			
Chloroprene (CR)	△		○
Nitryl (NBR)	○		○
Styrene butadiene(SBR)	△		○
Ethylene propylene (EP)	△		○
Silicone-HCR	○		○
Inorganic materials			
Glass	○	○	
Ceramic	○	○	

○ : Excellent(Cohesive failure,100%) △ : Not sufficient × : Poor(Cohesive failure,0%)

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HANDLING AND SAFETY

- ◆ Wear eye protection and protective glove when handling uncured sealant as it can irritate eyes. In case of eye contact, immediately flush eyes well with water and contact a physician.
- ◆ Substrate surface should be thoroughly cleaned with a suitable solvent such as alcohol, xylene, methyl ethyl ketone etc.
- ◆ Extended contact with the skin may cause irritation and should be avoided.

STORAGE

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

PACKAGING

- ◆ 100g tube available in case of 20
- ◆ 333ml cartridge available in case of 50 (5 boxes of 10 cartridge)

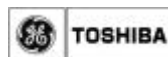
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