General Purpose Silicone Adhesive Sealant TSE387

TSE387 is a one-component, oxime cure, silicone adhesive sealant which cures at room temperature with moisture in the air. TSE387 has a pourable consistency and excellent adhesion to metals, plastics, ceramics, glass, etc without the use of primers.

KEY FEATURES

- Primerless adhesion to many substrates
- Neutral cure; Little risk of corrosion (corrosion to copper and copper alloys)
- Excellent weatherability, ozone, and chemical resistance
- Excellent electrical insulation properties
- Simple and easy-to-use one-component system
- Color variations; Clear (Translucent), White, Black

APPLICATIONS

- Industrial sealing and coating
- Electric insulation
- Thin section potting of electrical components
- General adhesive for metals, glass, plastics, wood, etc

TYPICAL PROPERTY DATA

TYPICAL UNCURED PROPERTIES		
Appearance		Flowable paste
Viscosity (23°C),	Pa·s {P}	60 {600}
Tack-free Time (23°C)	min.	90
TYPICAL CURED PROPERTIES (7days @23°C / 50%RH)		
Appearance		Elastic rubber
Specific gravity		1.04
Hardness (Type A)		25
Tensile strength	MPa {kgf/cm^2}	1.8 {18}
Elongation	%	300
Adhesive strength*	MPa {kgf/cm^2}	1.3 {13}
Thermal conductivity	W/(m·K) {cal/(cm·s·°C)}	0.18 {4.4×10^{-4}}
ELECTRICAL PROPERTIES (CURED)		
Volume resistivity	MΩ·m {Ω·cm}	1×10^7 {1×10^{15}}
Dielectric strength	kV/mm	20
Dielectric constant (60Hz)		2.9
Dissipation factor (60Hz)		0.004

* Aluminum Lap shear

Typical property data values should not be used as specifications. Assistance and specifications are available by contacting GE Toshiba Silicones Commercial Office.

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ADHESION PERFORMANCE

TSE387 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 TSE387 used with ME121, ME123, XP80-A5363 or without a primer.

SUBSTRRATE	NO PRIMER	ME121	ME123	XP80-A5363
Metals				
Copper	△*	○*		
Steel	○	○		
Mild steel	○	○		
Brass	△*	○*		
Stainless steel	△	○		
Pure aluminum	○	○		
Corrosion-resistant aluminum	○	○		
Galvanized sheet iron	○	○		
Tin plate	○	○		
Plastics				
Acrylic resin	○			
Phenolic resin	○			
Epoxy resin	○			
Soft polyvinyl chloride	×	×	○	
Rigid polyvinyl chloride	○	○	○	
Polyester film	○	○	○	
Unsaturated polyester resin	○	○	○	
Polyimide	○	○	○	
ABS resin	○	○	○	
Polypropylene	×	×	×	○
Polyethylene	×	×	×	×
Fluoride resin	×	×	×	
Silicone varnish laminate	○	○		
Silicone varnish coated glass cloth	○	○		
Rubbers				
Chloroprene	△		○	
Nitryl	△		○	
Styrene butadiene	△		○	
Ethylene propylene	△		○	
Silicone	○		○	
Inorganic materials				
Glass	○	○		
Mortar	△	○		
ALC	△	○		
Ceramic	○	○		
Wood				
Cedar	○	○		
Cypress	○	○		
Lauan	△	△		

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

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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

- 100g tube available in case of 20 • • • Clear / White
- 333ml cartridge available in case of 50 (5 boxes of 10 cartridge) • • • Clear / White / Black
- 18kg pail • • • Clear / White

TSE387 E
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TOSHIBA GE Toshiba Silicones Co., Ltd.

GE Toshiba Silicones Co., Ltd. (Tokyo Head Office)	Phone: 81-3-3479-5355	FAX: 81-3-3479-2944
	6-2-31 Roppongi, Minato-ku, Tokyo 106-8550, Japan	
GE Toshiba Silicones (Hong Kong) Co., LTD	Phone: 852-2629-0888	FAX: 852-2629-0803
GE Toshiba Silicones (Singapore) PTE. Ltd.	Phone: 65-326-3900	FAX: 65-326-3946
Taiwan Office	Phone: 886-2-719-0510	FAX: 886-2-2719-9903