

Product Data

Thermally Conductive Silicone Adhesive TSE3380

TSE3380 is a two-component, heat curable silicone rubber designed for thermally conductive applications. TSE3380 cures with heat to form an elastic, thermally conductive rubber and adheres well to various types of materials such as metals, plastics, glass and ceramics without the use of primers.

KEY FEATURES

- ◆ Convenient 1:1 mix ratio by weight
- ◆ Heat accelerated cure
- ◆ Excellent thermally conductivity
- ◆ Excellent adhesive properties ; primerless adhesion to many types of substrates
- ◆ Resistance to temperature extremes
- ◆ Non-corrosive to metal

APPLICATIONS

- ◆ Sealing and bonding for thermally conductive applications
 - Heat generating elements, Regulators, Rectifier, Thyristor, etc

TYPICAL PROPERTY DATA

UNCURED PROPERTIES	TSE3380	
	(A)	(B)
Appearance	Gray	White
Viscosity (23°C) Pa·s {P}	30 {300}	50 {500}
After mixing (23°C) Pa·s {P}	40 {400}	
Mix ratio by weight	1	: 1
CURED PROPERTIES (0.5hr@150°C)		
Appearance	Elastic rubber, Gray	
Specific gravity (23°C)	2.70	
Hardness (Type A)	70	
Tensile strength MPa {kgf/cm ² }	2.5 {25}	
Elongation %	100	
Adhesive strength* MPa {kgf/cm ² }	1.5 {15}	
Thermal conductivity W/m ·K {cal/cm·s·°C}	1.68 {4.0×10 ⁻³ }	
Linear expansion 1/K	1.4×10 ⁻⁴	
Volume resistivity MΩ·m {Ω·cm}	2.1×10 ⁶ {2.1×10 ¹⁴ }	
Dielectric strength kV/mm	15	
Dielectric constant (60Hz)	5.7	
Dielectric loss (60Hz)	0.002	

* Aluminum Lap Shear

Typical property data values should not be used as specifications.

ADHESION CAPABILITY

Suitable substrates

- Metal ; Aluminum, Copper, Ni plated, Stainless Steel
- Plastics ; PPS, PBT, Epoxy resin, Polyester, Phenolic resin
- Rubber ; Heat cured silicone rubber
- Inorganics ; Glass, Ceramics

Not suitable substrates

- Plastics ; PP, PE, Fluorocarbon resin
- Rubber ; RTV silicone rubber, Sulfur vulcanized rubber, Fluorocarbon rubber

GENERAL INSTRUCTIONS FOR USE

- ◆ Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. A sample patch should always be conducted before proceeding to determine compatibility.
- ◆ Wear eye protection when handling uncured rubber as it can irritate eyes. In case of eye contact, immediately flush eyes well with water and contact a physician.
- ◆ Maintain adequate ventilation 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

TSE3380(A)	1kg can available in cases of 10
TSE3380(B)	1kg can available in cases of 10

FOR INDUSTRIAL USE ONLY

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