

Technical Data Sheet

TSE382

General Purpose Silicone Adhesive Sealant

Product Description

TSE382 is a one-component, oxime curing, silicone adhesive sealant, which cures at room temperature with moisture in the air to an elastomeric rubber. This product bonds without the use of a primer to substrates like metals, plastics, ceramics and glass.

Key Performance Properties

- Primerless adhesion to many substrates
- Neutral cure; little risk of corrosion (corrosion to copper and copper alloys).
- Excellent high and low temperature resistance; from -55°C to 200°C continuous operation.
- Excellent dielectric properties
- Excellent weatherability; ozone and chemical resistance
- Can be supplied in translucent, black, gray and white
- Recognized by UL (File No. E56745) TSE382W and C; UL746 Ti Elec.150°C, Mech. 140°C. TSE382W and C; UL94HB

Applications

- A Waterproof sealant for electrical and communication equipment
- Air-tight sealant for meters to keep out water and dust
- Oil leakage preventive sealant for automotive engine parts
- General adhesive for metals, glass and plastics

Typical Product Data

Typical uncured Properties				
Appearance		Non-flowable paste		
Tack-free Time at 23°C	minutes	10		

Typical cured Properties	(7 days @ 23°C / 50% RH)			
Appearance		elastic rubber		
Specific gravity	g/cm ³	1.04		
Hardness	Shore A	28		
Tensile strength	MPa	1.9		
Elongation	%	380		
Thermal Conductivity	W/m.K	0.18		



Adhesive Properties (AL/AL)				
Adhesive strength	MPa	1.7		
Cohesive Failure	%	100		
Electrical Properties (cured) 1)				
Volume resistivity	ohm-cm	1x10 ¹⁵		
Dielectric strength	kV/mm	23		
Dielectric constant (60 Hz)		2.9		
Dielectric loss (60 Hz)		0.004		

¹⁾ are measured acc to JIS K6249 on 1 mm thick sheets

Specifications

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Momentive performance materials Technical Service RTV1 and RTV2.

Instructions for Use

Surface Preparation

TSE 382 will bond to many clean surfaces without the aid of primers. These surfaces typically include many metals, glass, ceramic, silicone rubber and some rigid plastics.

Where adhesion is required, surfaces should be thoroughly cleaned with a suitable solvent such as naphtha, iso propyl alcohol (IPA) or methyl ethyl ketone (MEK) to remove dirt, oil and grease. The surface should be wiped dry before applying the adhesive sealant.

When solvents are used, proper safety precautions must be observed.

Handling and Safety

Material Safety Data Sheets are available upon request from Momentive performance materials. This product releases methyl ethyl ketoxime vapours during cure. Adequate ventilation must be maintained in the work place at all time. MSDS's for solvents and other chemicals used with the Momentive performance materials products should be obtained from your supplier. When solvents are used, proper safety precautions must be observed.

Storage and Warranty Period

The warranted shelf life will be indicated by the 'use before date' on the associated documents with a minimum of 3 months when stored in the original unopened containers below 27° C.

Availability

TSE382C is available in 100 g tubes, 333ml cartridges and 18 kg pails. TSE382W is available in 100 and 180-gram tubes, 333ml cartridges and 18 kg pails.

TSE382G and B in 333ml cartridges



TSE382

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