



# TSE382

## TSE382

### 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 Features and Benefits

- 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

### Typical Physical Properties

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 <sup>3</sup>	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) <sup>1)</sup>		
Volume resistivity	ohm-cm	1x10 <sup>15</sup>
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

## Potential 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

## Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

## Product Safety, Handling and Storage

This product releases methyl ethyl ketoxime vapours during cure. Adequate ventilation must be maintained in the work place at all time.

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.

Customers should review the latest Material Safety Data Sheet (MSDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, and any special storage conditions required for safety. MSDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any Momentive Performance Materials (MPM) representative. **For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center.** Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

## Processing Recommendations

### 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.

## Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

## 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

## Contact Information

For product prices, availability, or order placement, contact our customer service by visiting [momentive.com/ContactSilicones](http://momentive.com/ContactSilicones).

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

## DISCLAIMER

The information provided herein was believed by Momentive Performance Materials Inc. (collectively with its subsidiaries, "Momentive") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product, and to determine the suitability of the product for user's intended application or use. All products supplied by Momentive are subject to Momentive's standard terms and conditions of sale. **MOMENTIVE MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY MOMENTIVE**, except that the product shall conform to Momentive's specifications. Nothing contained herein constitutes an offer for the sale of any product.

**Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.**