

TSE392, TSE397, TSE399

**One Component RTV Adhesive Sealants/Coatings**

**Product Description** TSE392, TSE397 and TSE399 adhesive/sealants/coatings are one component RTV's that cure quickly by reacting with atmospheric moisture forming a soft dielectric silicone rubber. These materials incorporate newly developed crosslinking chemistry and are non-corrosive to metallic substrates. They are particularly well suited for electrical/electronic applications.

This series of products differ in consistency, TSE392 is a thixotropic paste, TSE397 is semi-flowable, and TSE399 is flowable. When cured, they retain their elastomeric properties throughout the temperature range from -55C to 200°C

**Key Performance Properties**

**PRODUCT FEATURES**

- Non corrosive to metals, meets MIL-A-46146B corrosion test
- Fast cure at ambient temperatures
- Odour, slight alcohol
- Outstanding adhesion, including most plastics
- Outstanding electrical properties

**PRODUCT BENEFITS**

- One component, no mixing or de-airing required
- Soft consistency provides protection against mechanical and thermal shock
- Excellent electrical insulation
- Protects against moisture
- Varying viscosities allow thorough coating around complex assemblies (TSE399) and thicker coatings where required i.e., high voltage components (TSE392 & TSE397).
- Convenient packaging/dispensing tubes or cartridges.

**Typical Product Data**

<b>Uncured Properties</b>	<b>TSE392</b>	<b>TSE397</b>	<b>TSE399</b>
Cure System	Alkoxy	Alkoxy	Alkoxy
Colours Available	Clear /White	Clear/White/Black	Clear/White/Black
Consistency	Thixotropic Paste	Semi Flowable	Flowable
Viscosity, mPa.s @ 25°C	-	50,000	2,500
Tack Free Time,min	5	10	10
<b>Cured Properties</b>			
Density, g/cm <sup>3</sup>	1.04	1.04	1.04
Hardness (JIS A)	30	20	30
Tensile Strength, MPa	1.6	1.2	1.3
Elongation, %	400	300	140

Useful Temp. Range °C	-55 to 200	-55 to 200	-55 to 200
Diel. Strength , kV/mm	22	22	20
Dielectric Const. (60 Hz)	2.9	2.9	2.9
Dissip. Factor (60 Hz)	0.005	0.005	0.005
Volume Resist. ohm.cm	2x10 <sup>15</sup>	2x10 <sup>15</sup>	2x10 <sup>15</sup>

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

**Instructions for Use** **Surface Preparation**

Insure that surfaces to be sealed, coated or bonded are clean and free of grease, lubricating oils, release agents and dirt. To optimize fast cure and good adhesion, substrates must be thoroughly dry of cleaning solvents before applying the RTV. The RTV should be applied to one surface only. Wipe away excess uncured material with a clean cloth. After curing, removal of material is more difficult.

**Bonding**

These products offer primerless adhesion to many substrates including most plastics. Maximum adhesion is obtained 72 hours after full cure is obtained (2 mm thick specimen to an aluminum substrate).

**Curing**

These products cure at room temperature reacting with atmospheric moisture. Whenever possible, 25°C and 50% relative humidity should be provided. Higher temperature and humidity will cause faster cures while lower temperatures and lower humidity will slow the cure considerably. These products cure from the outside (outer skin) inward, therefore, cure rate is also dependent on the thickness of the material. It is not recommended to apply material thicker than 6 mm.

**Handling and Safety**

Material Safety Data Sheets are available upon request from Momentive performance materials. Similar information 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 shelf life will be indicated by the ' use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers below 27° C.

**Availability**

TSE39X is available in 18 kg pails, 333 ml cartridges and 100 g tubes. TSE397B is only available in 100 g tubes



PRINCIPAL LOCATIONS – Regional Information

North America	World Headquarters 187 Danbury Road Wilton, CT 06897, USA	T 800.295.2392	F 607.754.7517
Latin America	Rodovia Eng. Constância Cintra, Km 78,5 Itatiba, SP – 13255-700, Brazil	T +55.11.4534.9650	F +55.11.4534.9660
Europe, Middle East, Africa and India	D-51368 Leverkusen Germany	T 00.800.4321.1000 T +31.164.293.276	F +31.164.241.750
Pacific	Akasaka Park Building - 5-2-20 Akasaka Minato-ku, Tokyo 107-6112 Japan	T +81.3.5544.3100	F +81.3.5544.3101

CUSTOMER SERVICE CENTERS

North America	Charleston, WV 25314, USA E <a href="mailto:cs-na.silicones@momentive.com">cs-na.silicones@momentive.com</a>		
	• Specialty Fluids	T 800.523.5862	F 304.746.1654
	• UA, Silanes, Resins, and Specialties	T 800.334.4674	F 304.746.1623
	• RTV Products-Elastomers	T 800.332.3390	F 304.746.1623
	• Sealants and Adhesives & Construction	T 877.943.7325	F 304.746.1654
Latin America	E <a href="mailto:cs-la.silicones@momentive.com">cs-la.silicones@momentive.com</a>		
	• Argentina & Chile	T +54.11.4862.9544	F +54.11.4862.9544
	• Brazil	T +55.11.4534.9650	F +55.11.4534.9660
	• Mexico & Central America	T +52.55.5899.5135	F +52.55.5899.5138
	• Venezuela, Ecuador, Peru, Colombia, & Caribbean	T +58.212.285.2149	F +58.212.285.2149
Europe, Middle East, Africa and India	E <a href="mailto:cs-eur.silicones@momentive.com">cs-eur.silicones@momentive.com</a>	T 00.800.4321.1000 T +31.164.293.276	F +31.164.241750
	E <a href="mailto:cs-ap.silicones@momentive.com">cs-ap.silicones@momentive.com</a>		
Pacific	• Japan	T +81.276.20.6182	
	• China	T +86.21.5050.4666 (ext. 1523)	
	• Korea	T +82.2.6201.4600	
	• Singapore	T +65.6220.7022	
Worldwide Hotline	Worldwide Web <a href="http://www.momentive.com">www.momentive.com</a>	T 800.295.2392 T +607.786.8131	F +607.786.8309

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC., MOMENTIVE PERFORMANCE MATERIALS USA INC., MOMENTIVE PERFORMANCE MATERIALS ASIA PACIFIC PTE. LTD., MOMENTIVE PERFORMANCE MATERIALS WORLDWIDE INC., MOMENTIVE PERFORMANCE MATERIALS GmbH, MOMENTIVE PERFORMANCE MATERIALS SUISSE Sarl, THEIR SUBSIDIARIES AND AFFILIATES DOING BUSINESS IN LOCAL JURISDICTIONS (collectively "SUPPLIERS"), ARE SOLD BY THE RESPECTIVE LEGAL ENTITY OF THE SUPPLIER SUBJECT TO SUPPLIERS' STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIERS MAKE NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SUPPLIERS' PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. AFOREMENTIONED EXCLUSIONS OR LIMITATION OF LIABILITY ARE NOT APPLICABLE TO THE EXTENT THAT THE END-USE CONDITIONS AND/OR INCORPORATION CONDITIONS CORRESPOND TO THE RECOMMENDED CONDITIONS OF USE AND/OR OF INCORPORATION AS DESCRIBED BY SUPPLIER IN ITS PRODUCT DATA SHEET AND/OR PRODUCT SPECIFICATIONS. EXCEPT AS PROVIDED IN SUPPLIERS' STANDARD CONDITIONS OF SALE, SUPPLIERS AND THEIR REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.

Each user bears full responsibility for making its own determination as to the suitability of Suppliers' materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Suppliers' products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Suppliers' Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Suppliers. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Suppliers or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.