

TSE3996

**Low Volatile Silicone Coating**

**Product Description**

TSE3996 is a one-component, low viscosity, low volatile silicone coating, which cures at room temperature to an elastomeric rubber upon exposure to humidity in the air. This product, which has a quick surface cure and is non-corrosive to metals, including sensitive metals such as copper, emits no harsh odours during cure and has good adhesion to a wide range of substrates.

**Key Performance Properties**

- Low volatiles
- Non-corrosive (meets MIL-A-46146 B corrosion test)
- Room temperature condensation cure
- Fast cure
- Low viscosity (solventless)
- Low odour cure; releases an alcohol vapour during curing
- Excellent adhesion to a wide range of substrates

**Applications**

- Moisture proof coating of electrical and electronic parts (Conformal coating)
- Thin section potting of electrical and electronic parts.
- Moisture proof potting of LED displays

**Typical Product Data**

| <b>Typical uncured Properties</b>                        |                   |                         |
|--|-------------------|-------------------------|
| Appearance   |                   | Flowable white or black |
| Viscosity at 23°C,                                       | Pa·s              | 1.7                     |
| Tack-free Time at 23°C                                   | minutes           | 10                      |
| Corrosion MIL-A-46146 B                                  |                   | None                    |
| <b>Typical cured Properties (7 days @ 20°C / 50% RH)</b> |                   |                         |
| Appearance   |                   | Elastic rubber          |
| Specific gravity   | g/cm <sup>3</sup> | 1.03                    |
| Hardness   | Shore A           | 23                      |
| Tensile strength   | MPa               | 1.2                     |
| Elongation   | %                 | 150                     |
| Adhesive strength (AL/AL)                                | MPa               | 0.32                    |
| Volatile siloxane  | Wt %              | 0.028                   |



| <b>Electrical Properties (cured)</b> |        |                    |
|--------------------------------------|--------|--------------------|
| Volume resistivity                   | ohm·cm | 2x10 <sup>15</sup> |
| Dielectric strength                  | kV/mm  | 23                 |
| Dielectric constant (60 Hz)          |        | 2.9                |
| Dielectric loss (60 Hz)              |        | 0.005              |

### 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 3996 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 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. 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 25° C.

### Availability

TSE 3996 is available in cases containing 10 cartridges of 333ml.



PRINCIPAL LOCATIONS – Regional Information

|  |   |   |                    |
|--|---|---|--------------------|
| North America                            | World Headquarters<br>187 Danbury Road<br>Wilton, CT 06897, USA               | T 800.295.2392                          | F 607.754.7517     |
| Latin America                            | Rodovia Eng. Constâncio Cintra,<br>Km 78,5<br>Itatiba, SP – 13255-700, Brazil | T +55.11.4534.9650                      | F +55.11.4534.9660 |
| Europe, Middle East,<br>Africa and India | D-51368 Leverkusen<br>Germany   | T 00.800.4321.1000<br>T +31.164.293.276 | F +31.164.241.750  |
| Pacific                                  | Akasaka Park Building - 5-2-20 Akasaka<br>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<br>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<br>Specialties   | T 800.334.4674                          | F 304.746.1623     |
|  | • RTV Products-Elastomers   | T 800.332.3390                          | F 304.746.1623     |
|  | • Sealants and Adhesives &<br>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,<br>Colombia, & Caribbean  | T +58.212.285.2149                      | F +58.212.285.2149 |
| Europe, Middle East,<br>Africa and India | E <a href="mailto:cs-eur.silicones@momentive.com">cs-eur.silicones@momentive.com</a>                            | T 00.800.4321.1000<br>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<br><a href="http://www.momentive.com">www.momentive.com</a>                                       | T 800.295.2392<br>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.