

# SSI

## silicone seam sealer mastic

### Product Description

GE SS1 silicone seam sealer mastic is a high performing sealant for protection of seams, penetrations, and fasteners on various architectural surfaces and roofing substrates. Upon cure, SS1 forms a durable, breathable and weatherproof barrier that is highly resistant to degradation from UV and natural weathering.

### Key Features and Typical Benefits

- **Silicone Durability** – Cured silicone rubber exhibits excellent long-term resistance to natural weathering including: extreme temperatures, ultraviolet radiation, rain and snow.
- **VOC Compliant** – High solids solvent-free formulation and low Volatile Organic Compounds content.
- **Ease of Use** – Single-component material that can be applied with trowel, stiff brush or glove hand. Adequate open time provides sufficient time for tooling to applied area.
- **High Build Formulation** – Low sag.
- **Storage & Shelf Life** – SS1 can be stored in unheated warehouses during the cooler months without the risk of freezing. Shelf life is 18 months from date of manufacture when properly stored.

### Typical Physical Properties

Property*	Value	Test Method
Appearance	Bright White	Visual
VOC	~34 g/L	EPA Method 24
Application Rate	500-1000 g/min	E56
Specific Gravity	1.18-1.25	P15
Sag/Slump	1 inch (25 mm)	ASTM D2202
Skin-Over Time	5-10 minutes	WPSTM C-560
Tack Free Time	30-60 minutes	ASTM C679
Cure Time	3-4 days	1/4" (6 mm) depth of cure
Hardness (A) Type Indenter	24	ASTM D2240
Ultimate Tensile Strength	220 psi (1.52 MPa)	ASTM D412
Tensile at 50% Elongation	52 psi (0.358 MPa)	ASTM D412
Tensile at 100% Elongation	86 psi (0.593 MPa)	ASTM D412
Ultimate Elongation	230%	ASTM D412
Joint Movement	±25%	ASTM C719
Low Temperature Flexibility	Pass	ASTM D522 (B)

\*Properties tested @ 72°F (24°C), 50% RH

GE is a registered trademark of General Electric Company and is under license by Momentive Performance Materials Inc. Momentive Performance Materials provides versatile materials as the starting point for its creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications. We are helping customers solve product, process, and performance problems; our silanes, fluids, elastomers, sealants, resins, adhesives, urethane additives, and other specialty products are delivering innovation in everything from car engines to biomedical devices. From helping to develop safer tires and keeping electronics cooler, to improving the feel of lipstick and ensuring the reliability of adhesives, our technologies and enabling solutions are at the frontline of innovation.



## SSI silicone seam sealer mastic

### Packaging & Colors

SS1 is available in nominal 2 gallon plastic pails filled to 20 LBS - (9.08 KG). Color is bright white.

### Technical Services

Additional technical information, literature, laboratory testing and application engineering are available upon request. Any technical advice furnished by Momentive Performance Materials (MPM) or any representative of MPM concerning any use or application of any sealant is believed to be reliable but MPM makes no warranty, expressed or implied, of suitability for use in any application for which such advice is furnished.

### Storage & Handling

SS1 should be stored in unopened containers and protected from exposure to direct sunlight and high heat. Do not open containers until ready for use and store containers below 109°F (43°C) to maintain full shelf life. SS1 generally can be stored in unheated warehouses during the cooler months without the risk of freezing.

SS1 reacts with atmospheric moisture to cure. Once containers are open and exposed to the atmosphere, a skin will form on the material over time. The formation of skin will be negligible in winter months but can form quickly (minutes) under hot and humid summer conditions. Cured skin that has formed on the top of the material should be removed or screened. Take appropriate precautions to cover open containers during use.

SS1 should be applied as received and dilution with solvent is not recommended. If settling in the package has occurred, stir or shake the material prior to use.

### Installation Considerations

#### Surface Preparation

SS1 can be applied to itself as well as a variety of roofing materials and substrates including: single ply membranes (TPO, PVC, EPDM, CSPE, and hypalon), spray-applied polyurethane foam, metal, concrete and common parapet/coping materials. Asphaltic substrates such as; modified bitumen, smooth BUR, and granulated cap sheet which may require bleed blocker. Surfaces to which SS1 is to be applied must be clean, dry, structurally sound and free of loose particles, dirt, dust, oil, frost, mildew and other contaminants. Damage to the underlying roof system, such as cracks, openings, holes, etc. should be properly repaired prior to application. Saturated substrates must be removed and repaired appropriately. Users of SS1 should verify that suitable adhesion can be attained to all existing roofing materials to be sealed prior to large scale application of the sealant. It is recommended that a test patch be cleaned and sealed with SS1 to verify the effectiveness of the cleaning method and adhesion to the surface(s).

### Application Guidelines

Cured material can be removed from surfaces with a razor blade, or scrubbed off with steel wool or synthetic abrasive pads and solvent. Surfaces not intended for sealant should be masked or covered.

Apply SS1 to ensure a uniform build and thorough coverage. SS1 is typically applied in one application. If applying in multiple applications, allow adequate time between each application for the sealant to cure before applying additional material. Final cured thicknesses must be free of voids, pinholes, cracks or blisters.

### Application Temperature

SS1 can be applied throughout the year as long as the substrates being sealed are completely dry. Frost and/or moisture will interfere with adhesion. Lower temperatures will lengthen the skin over, tack free and ultimate cure time and may require an overnight cure in winter months to allow the top coat application to proceed (film build may not be sufficient to allow walk over). Higher temperatures will accelerate the cure rate and decrease the open time of the sealant. Under summer conditions time to apply top coat over sealant may be as short as 1 hour. Do not apply SS1 when substrate surface temperatures exceed 176°F (80°C).

### Application Equipment

SS1 can be applied by trowel, stiff brush or gloved hand. Cleanup of equipment containing uncured material may be accomplished by cleaning with mineral spirits or toluene. DO NOT USE water or alcohol based solvents.

### Customer Evaluation

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

### Limitations

#### SS1 is not intended nor recommended:

- For use on pedestrian, deck or frequent traffic bearing surfaces.
- Cold storage roofing application without vapor barrier, cryogenic tank applications or continuous water immersion service.

#### SS1 should not be applied to:

- Unprepared surfaces including but not limited to those that are wet, dusty, oily, mildewed, heavily chalked, blistered or otherwise structurally unsound.
- Building materials that might bleed oil or solvents. These include, but are not limited to, certain vulcanized rubber products, tapes, failed sealants, some caulking compounds and asphaltic/mastic materials unless appropriate preparation or primers are used. Consult MPM technical services for primer recommendations.
- Surfaces where adhesion has not been verified by testing.

## **SSI silicone seam sealer mastic**

### **Precautions**

- Inclement weather may negatively affect uncured SS1 by displacement of uncured material; therefore, application of sealant should not proceed if heavy rain, hail or snowfall is impending or expected within 24 hours of application.
- SS1 requires atmospheric moisture for propagation of cure thus it is not suitable for use in totally confined spaces.

### **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the 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**

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at [www.ge.com/silicones](http://www.ge.com/silicones) or, upon request, from any Momentive Performance Material representative. Use of other materials in conjunction with Momentive Performance Materials sealants products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

---

## CUSTOMER SERVICE CENTERS

---

### Americas

+1 800 295 2392  
+1 614 986 2495

**Email:** 4information@momentive.com

---

### Europe, Middle East, Africa and India

+00 800 4321 1000  
+40 212 534754

**Email:** 4information.eu@momentive.com

---

### Asia Pacific

**Japan**  
+81 276 20 6182

**China**  
+800 820 0202

**All APAC**  
+60 3 9206 1543

**Email:** 4information.ap@momentive.com

---

**Visit us at [www.ge.com/silicones](http://www.ge.com/silicones)**

---

#### DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S 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, SUPPLIER MAKES 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 ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS 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 Supplier's 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 Supplier's 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 Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. 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 Supplier 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.