MOMENTIVE™

# SWS*
## silicone weatherproofing sealant

### Product Description

SWS weatherproofing sealant is a single-component, neutral cure silicone, which is an excellent candidate for use in new or remedial weathersealing applications. SWS exhibits negligible change in physical properties after weathering and upon cure, becomes a low- modulus, formed-in-place durable rubber building joint & glazing sealant.

### Typical Performance Properties

#### Performance

- **Silicone Durability** - cured silicone rubber exhibits excellent long-term resistance to natural weathering, including: ultraviolet radiation, high and low temperatures and rain and snow, with little change in elasticity.
- **High Performance** - SWS offers the durability of a true silicone sealant but at an economical price level similar to lesser-performing sealant types.
- **±35% Movement Capacity** - can accommodate 35% movement in both extension and compression and has excellent recovery after cycling.
- **Primerless Adhesion** - to many substrates and finishes. May be considered a candidate for use with the following materials: glass, polycarbonate, vinyl, plastics, wood, painted & anodized aluminum, brick, terra-cotta, ceramic and porcelain materials, concrete and natural stones. Some finishes or substrates may require a primer.

#### Application

- **Good Workability** - temperature stable paste which is easily gunned and tooled under hot and cold conditions.
- **Extended Work Life** - designed to allow sufficient time for placement and tooling before skinning.



**Licensed**
Products

## Basic Uses

SWS is an excellent candidate to consider:

- As a weatherproofing material when sealing between dissimilar or similar materials in either new or remedial glazing and sealing applications, window perimeters and punched openings.
- For sealing to precast concrete, site cast concrete and tilt-up concrete joints.
- As a general purpose sealant for seams and curtainwall frames, screw heads, back pans, etc.

## Customer Evaluation

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

## Packaging

SWS is available in 10.1 fl. oz. (299 ml) plastic caulking cartridges and 20.0 fl. oz. (591 ml) foil sausage packs.

## Colors

SWS is available in 7 standard colors:

SWS02 – White
SWS03 – Black
SWS04 – Limestone
SWS08 – Light Grey
SWS09 – Aluminum Grey
SWS20 – Precast White
SWS97 - Bronze

## Limitations

**SWS is not:**

- For use in structural glazing applications.
- For use in food contact applications.
- For use in applications where the product will be in continuous contact with water.
- Paintable (except when using GE SEC2400 SilShield* silicone elastomeric coating).
- For use on wet, damp, frozen or contaminated surfaces.

## Technical Services

Additional technical information, literature, laboratory testing and application engineering may be available upon request from MPM. Any technical advice furnished by MPM or any representative of MPM concerning any use or application of any MPM product 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.

## Applicable Standards

SWS meets or exceeds the requirements of the following specifications: **American Society for Testing & Materials International**.

- C 920 Standard Specification for Elastomeric Joint Sealants; Type S, Grade NS, Class 35, Use A, G, M, O.

## Joint Designs and Dimensions

**Joint Movement** - All moving joints should be designed so as not to allow three-sided adhesion of the sealant to occur. Three-sided adhesion hinders the ability of the sealant to extend and compress freely as desired and can lead to early joint failure (reference ASTM C 1193 *Standard Guide for Use of Joint Sealants*).

**Joint Width** - Designed joint width must be at least 3X the total anticipated joint movement. A minimum width of $^1/_4$" is recommended in all applications and the recommended sealant profile is an hourglass shape with the depth of the sealant over the crown of the backer rod between $^1/_8$" and $^3/_8$".

## Typical Properties – Supplied

| Property | Value(1) | Test Method |
|---|---|---|
| Consistency | Paste | |
| Polymer | 100% Silicone | |
| VOC | 1.20 wt.% | WPSTM C1454 |
| Work Life | 30-40 minutes | |
| Tack Free Time (@ 72°F/22°C, 50% RH) | 3-4 hours | ASTM C679 |
| Sag/Slump | 0.1" max (2.5 mm) | ASTM D2202 |

## Typical Properties – Cured

| Property | Value(1) | Test Method |
|---|---|---|
| Hardness | 22 | ASTM D2240 |
| Tensile at 25% | 19.3 psi (0.13 MPa) | ASTM 1135 |
| Tensile at 50% | 30.6 psi (0.21 MPa) | ASTM 1135 |
| Peel Strength (21-day cure @ 72°F/22°C) 50% RH) | >45 pli | ASTM C794 |
| Movement Capability | ±35% | ASTM C719 |
| Service Temperature Range (after cure) | -55°F to +250°F (-48°C to 121°C) | |
| Application Temperature Range | +40°F to +122°F (4°C to 50°C) | |
| Cure Time ($^1/_4$" or 6 mm deep section) @ 72°F/22°C 50% RH | 3-4 days | |
| Full Cure (most common bead sizes) | 7-14 days | |

(1) Average value. Actual value may vary.

## Installation

Sealants may not adhere or maintain long-term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application. *In all cases the applicator must confirm the acceptability of each sealant-substrate combination with a site adhesion test prior to proceeding with project installation.* A GE sealant primer may be selected to enhance sealant bonding on some difficult to adhere to substrates. MPM can provide information and suggestions to user upon request.

## Surface Preparation

**Glass, Metals Paints, Smooth Surfaces, etc.**

- Smooth surfaces can be wiped clean using a rag dampened with a cleaning solvent (Isopropyl Alcohol is typically useful). Proceed by cleaning the surfaces using a rag wetted with solvent and immediately use a second clean rag to wipe the wet solvent from the surface before it evaporates. Repeat this procedure as necessary until no contaminants are visible on the second cleaning rag.
- Rough surfaces such as concrete, brick and masony can be cleaned by wire brush, mechanical abrading, grinding or a combination of these methods to provide a stable clean surface for sealant application. Secondly, follow this with an air blow or brush (soft-bristled) to remove dust.
- All surfaces that are to receive sealant must be clean, dry and free of contaminants (such as moisture/frost, oils, concrete form release agents, old sealants, asphalt and other surface treatments, etc.) to allow for optimal adhesion.

## Masking

Masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant. Masking tape should be removed immediately after tooling the sealant and before the sealant begins to skin over (tooling time).

## 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 or, upon request, from any MPM representative. Use of other materials in conjunction with GE sealants products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

## Emergency Service

Momentive Performance Materials maintains an around-the-clock emergency service for its products.

| Location | Emergency Service Provider | Emergency Contact Number |
|---|---|---|
| Mainland U.S., Puerto Rico | CHEMTREC | 1-800-424-9300 |
| Alaska, Hawaii | CHEMTREC | 1-800-424-9300 |
| Canada | CHEMTREC | 1-800-424-9300 |
| Europe, Israel | NCEC | +44 (0) 1235239670 |
| Middle East | NCEC | +44 (0) 1235239671 |
| Asia Pacific (except China) | NCEC | +44 (0) 1235239670 |
| China | NCEC | +86-10-5100-3039 |
| Latin America (except Brazil) | NCEC | +44 (0) 1235239670 |
| Brazil | SOS Cotec | 08000111767 or 08007071767 |
| All other locations world wide | NCEC | +44 (0) 1235239670 |
| At sea | Radio U.S. Coast Guard in U.S. waters<br>NCEC in International waters | +44 (0) 1235239670 |

For Health related calls, contact Momentive Performance Materials at +1-518-233-2500 (English only).

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

## CUSTOMER SERVICE CENTERS

| | | | |
|---|---|---|---|
| **North America** | **E** cs-na.silicones@momentive.com | | |
| | • Specialty Fluids | **T** +1.800.523.5862 | **F** +1.304.746.1654 |
| | • UA, Silanes and Specialty Coatings | **T** +1.800.334.4674 | **F** +1.304.746.1623 |
| | • RTVs and Elastomers | **T** +1.800.332.3390 | **F** +1.304.746.1623 |
| | • Consumer Sealants & Construction Sealants and Adhesives | **T** +1.877.943.7325 | **F** +1.304.746.1654 |
| **Latin America** | **E** cs-la.silicones@momentive.com | | |
| | • 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** +52.55.2169.7670 | **F** +52.55.2169.7699 |
| | • Venezuela, Ecuador, Peru Colombia & Caribbean | **T** +58.212.285.2149 | **F** +58.212.285.2149 |
| **Europe, Middle East, Africa and India** | **E** cs-eur.silicones@momentive.com | **T** +00.800.4321.1000<br>**T** +40.21.3111848 | |
| **Pacific** | **E** cs-ap.silicones@momentive.com | **T** +1.800.820.0202<br>**T** +0.81.276.20.6182 | **F** +81.276.31.6259 |
| **Worldwide Hotline** | | **T** +1.607.786.8131<br>**T** +1.800.295.2392 | **F** +1.607.786.8309 |
| **Visit us at www.ge.com/silicones** | | | |



161-010-20E-GL
CDS: DataSWS (05/13)