SilGlaze* II SCS2800

silicone glazing sealant

Product Description

SilGlaze II SCS2800 silicone glazing sealant is a one-part, neutral, fast cure, medium modulus silicone sealant that develops significant green strength in the early cure hours. SilGlaze II SCS2800 silicone glazing sealant may be an excellent candidate for use as a bedding seal in the construction of residential and commercial doors and windows as well as a general-purpose weather and glazing sealant in new or remedial applications.

Typical Performance Properties

- 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 negligible change in elasticity.
- Primerless Adhesion May be considered a candidate for use
 with numerous construction-related materials, including: glass,
 polycarbonate, vinyl, numerous plastics, treated and untreated
 wood, fluoropolymer and powder coated paints, coated aluminum,
 ceramic and porcelain materials. Some finishes or substrates may
 require a primer.
- Fast Green Strength Proprietary patented technology develops green strength in the first 24 hours faster than most other single-component fenestration sealants. SCS2800 sealant series can attain 10-15 psi in 5 hours and up to 30-40 psi after 24 hours in some designs.
- ±50% Movement Capacity Can accommodate 50% movement in both extension and compression.
- Excellent Processability The low pumping viscosity and high application rate of SilGlaze II SCS2800 sealant provides for longer pump life with reduced maintenance on equipment and faster with easier tooling effort.
- Easy Repairs The traditional silicone rubber properties of SilGlaze II SCS2800 sealant allows for frames or components to be easily deglazed as would be expected from silicone materials.
- Product Chemistry Neutral cure.

Momentive Performance Materials is the manufacturer of GE construction sealants. The company provides versatile materials as the starting point for our creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications. We are helping cus-

tomers 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.



Basic Uses

- Silglaze II SCS2800 sealant may be used as a perimeter weatherseal for field glazing, window installation and general purpose sealing applications.
- Silglaze II SCS2800 sealant may be used for in-shop window fabrication as a bedding bead or for cap, toe and heel head applications.



Limitations

SilGlaze II SCS2800 sealant is not recommended:

- For use underwater or in other applications where the product will be in continuous contact with water.
- For use in food contact applications.
- When painting of the cured sealant is desired (unless appropriate specialized paint products are used).
- For adhesion on bare metals or surfaces subject to corrosion (i.e., mill aluminum, bare steel, etc.).

SilGlaze II SCS2800 sealant should not be applied or used:

- In structural glazing applications.
- On wet, damp, frozen or contaminated surfaces.
- In cavities or designs where the cure depth exceeds 1/2".

Precautions

- This material requires atmospheric moisture to cure from paste to rubber and may not attain its listed final cured rubber properties when used in designs or applications where the silicone is encapsulated and without access to atmospheric moisture.
- When used in glass-to-glass butt joints, use caution to completely fill the joint as air pockets or bubbles can become entrapped in the sealant which may be visible through the sealant
- May stress craze polycarbonate in some applications.
- Maximum cure depth from an air interface should not exceed 3/8". When used in colder, less humid environments, cure depth should not exceed 1/4" from an air interface.

Packaging

SilGlaze II SCS2800 sealant is available in 10.1 fl. oz. (299 ml) plastic caulking cartridges with either fixed or removable nozzles, 5 gallon plastic pails (40.0 lbs. / 18.15 kg), and in 55 gallon fiber or steel drums (450.0 lbs. / 204.3 kg) with a polyethylene bag liner.

Colors

SilGlaze II SCS2800 sealant is available in 7 standard colors plus translucent and can also be custom colored.

Grade	Color
SCS2801	Translucent
SCS2802	White
SCS2803	Black
SCS2809	Gray/Aluminum
SCS2892	Blue White
SCS2897	Bronze
SCS2800.0349	Beige

Technical Services

Additional technical information and literature may be available from Momentive Performance Materials¹. Laboratory facilities and application testing are available upon request from Momentive Performance Materials¹. Any technical advice furnished by Momentive Performance Materials¹ or any representative of Momentive Performance Materials¹ concerning any use or application of any sealant is believed to be reliable but Momentive Performance Materials¹ makes no warranty, express or implied, of suitability for use in any application for which such advice is furnished.

Applicable Standards

SilGlaze II SCS2800 sealant meets or exceeds the requirements of the following standards and/or specifications:

American Society for Testing & Materials International

ASTM C920 Standard Specification for Elastomeric Joint Sealants;
 Type S, Grade NS, Class 50, Use A, G, O

U.S. Federal Specifications:

(Widely referenced but cancelled Sept. 1996)

- TT-S-001543A Sealing Compound: Silicone Rubber Base (for Caulking, Sealing & Glazing in Buildings and Other Structures)
- TT-S-00230C Sealing Compound: Elastomeric Type, Single Component (for Caulking, Sealing & Glazing in Buildings and Other Structures)

American Architectural Manufacturers Association

- AAMA 802.3-92 Back Bedding Glazing Compound, Type 1
- AAMA 802.3-92 Back Bedding Glazing Compound, Type 2
- AAMA 805.2-92 Back Bedding Glazing Compound, Group C
- AAMA 808.3-92 Exterior Perimeter Sealing Compound

Typical Properties - Supplied

Property	Value ⁽¹⁾	Test Method
Consistency	Paste	
Polymer	100% silicone	
VOC	33 g/l	WPSTM C1454
Work Life (tooling time)	6-12 minutes	
Tack Free Time	30 minutes (@ 72°F, 50% RH)	ASTM C679
Sag/Slump	0.1" max.	ASTM D2202

Typical Properties - Cured

(after cure of 21 Days at 23°C (73°F) & 50% Relative Humidity)

Property	Value ⁽¹⁾	Test Method
Hardness, Durometer (Type A Indentor)	19	ASTM D2240
Ultimate Tensile Strength	227 psi (1.57 MPa)	ASTM D412
Ultimate Elongation	483%	ASTM D412
Peel Strength (average) (21-day cure @ 75°F (21°C) 50% RH)	57 pli	ASTM C794
Joint Movement Capability	±50%	ASTM C719
Service Temperature Range (after cure)	-55°F to +300°F (-48°C to 149°C)	
Weathering and U.V. Resistance	Excellent	GE 20 yr. study
Cure Time (1/4" or 6 mm deep section) @ 75°F (24°C) 50% RH	24 hours	
Full Cure (most common bead sizes)	3-4 days	

(1) Average value. Actual value may vary.

Installation

IN ALL APPLICATIONS IT IS IMPORTANT TO CONFIRM THE ACCEPTIBILITY OF EACH SEALANT-SUBSTRATE COMBINATION WITH AN ADHESION TEST PRIOR TO PROCEEDING WITH USE.

Surface Preparation

Silglaze II SCS2800 sealant has been formulated to develop adhesion to most materials commonly used in the manufacturing of commercial glazing constructions including: glass, vinyl extrusions, fluoropolymer, acrylic, and polyester paints, powder coated aluminum, and numerous plastic materials. Sealants may not adhere to these substrates or less than optimal adhesion may result if the surface is contaminated. Foreign materials such as, but not limited to, dirt, dust, oils and water and other contaminants particular to certain substrates including machine oils, water repellants, lubricants, waxes on painted surfaces, salt deposition on anodized surfaces can and may interfere with development of adhesion.

Momentive Performance Materials¹ can provide, upon request, laboratory testing services to evaluate the adhesion and compatibility of its sealants to submitted substrates. This testing can provide information on adhesive bonding quality to individual substrates and direction to the user on how adhesion may be improved through modification of the substrate surface properties by special cleaning and/or priming procedures. Momentive Performance Materials can also provide upon request technical information including specific cleaning procedures and priming recommendations for the customer to evaluate. Momentive Performance Materials does not provide joint design services.

Users of this material are strongly advised to conduct their own testing to determine if the adhesion to the desired substrate is satisfactory for their needs. It is also recommended that the user conduct periodic quality control testing on their substrates and sealant during the course of using them in manufacturing operations to maintain a continued assurance that substrate, sealant or other conditions that could affect adhesion have not changed and that adhesion requirements are being met.

Sealant Application

- Begin by installing backup material for joint or joint filler, setting blocks, spacer shims and tapes as needed.
- In a continuous operation, apply Silglaze II SCS2800 sealant horizontally in one direction and vertically from the bottom to the top of the joint opening.
- Apply the sealant with a positive pressure by pushing the bead ahead of the nozzle and making sure that the entire cavity is filled sans air pockets or voids.
- Tooling should be done neatly, forcing the sealant into contact with the sides of the joint or cavity, thus helping to eliminate any internal voids and assuring good substrate contact.
- Due to the smooth consistency of Silglaze II SCS2800 sealant tooling agents such as water, soap or detergent solutions are not necessary or recommended. Dry tooling is recommended.
- For cap bead glazing the sealant applied to the sill should be tooled in such a fashion to prevent pooling of precipitation and cleaning solution.
- Sealant should only be applied to surfaces that are clean, dry and free of frost.

Cleaning of Excess Sealant

- For glass, metal, and plastic surfaces uncured excess material can be removed using a solvent. Use care when using solvents on plastic materials as some solvents can soften some plastics.
- For glass, metal, and plastic surfaces cured excess material can be removed using a blade by scraping or cutting.
- If excess material unintentionally contacts the surfaces of porous materials, the sealant is best allowed to progress through the initial cure or set-up and then mechanically removed by abrasion or other suitable means.

Method of Application

SilGlaze II SCS2800 sealant is easily dispensed directly from cartridges using standard caulking guns or from pails using standard bulk caulking gun equipment. The sealant may also be dispensed from pails and drums with standard single component pumping equipment.

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.gesealants.com or, upon request, from any Momentive Performance Materials 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 Materials¹ maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC), Transport Canada (CANUTEC), and the Chemical Emergency Agency Service also maintain an around-the-clock emergency service for all chemical products:

Location	Products	All Chemical Products
Mainland U.S., Puerto Rico	518.233.2500	CHEMTREC: 800.424.9300
Alaska, Hawaii	518.233.2500 (collect)	CHEMTREC: 800.424.9300
Canada	518.233.2500 (collect)	CANUTEC: 613.996.6666 (collect) or CHEMTREC: 800.424.9300
Europe, Middle East, Africa	+32.(0)14.58.45.45 (Belgium)	CHEMTREC: +1-703.527.3887 (collect)
Latin America, Asia/Pacific, all other locations worldwide	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials ¹ at 518.233.2500 or CHEMTREC at 800.424.9300	

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

Principal Locations

Regional Information		Phone	Fax
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		RTV Products-Elastomers 800.332.3390	304.746.1623
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Canada Toronto, Canada	Within Canada Outside Canada	800.668.4644 905.858.5187	905.858.6687
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