

# **Product Description**

GE Contractors SCS1000 silicone sealant is a one-component acetoxy silicone material that provides excellent bonding, weatherability and elasticity for general purpose sealing and bonding. GE Contractors SCS1000 silicone sealant is a paste material, which cures into a flexible rubber when exposed to atmospheric moisture.

# **Typical Performance Properties**

- **Silicone Durability** Cured silicone provides excellent longterm resistance to natural weathering, humidity, and high and low temperatures, with negligible change in elasticity.
- Fast Cure Time Tack free in 30 minutes and full cure of many common bead sizes in 24-48 hours minimizing wait time before placing into use.
- **Durable Adhesion** Able to bond to many common substrates and finishes, including: glass, ceramic tiles, porcelain, painted surfaces, some plastics, cultured marble, polished granites and marbles and many composite materials including fiberglass. Some substrates or finishes may require use of a primer.
- ±25% Movement Capacity Can accommodate 25% movement in both extension and compression and has excellent recovery after cycling.
- **Gunnability** The uncured silicone can be easily gunned and tooled under hot or cold conditions.
- **Stable Rubber** Once properly cured, the material remains fully elastic over a range of -45°F (-48°C) to 350°F (204°C).
- Workability Non-sag paste useful on horizontal, vertical or overhead surfaces.

Momentive Performance Materials is an exclusive licensee of General Electric. 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.



Exclusive Licensee

#### **Basic Uses**

- Contractors SCS1000 sealant is useful in general purpose sealing and glazing applications to glass and painted metal surfaces.
- Contractors SCS1000 sealant is useful as a formed-in-place rubber gasket seal on a variety of materials and for sealing of: sheet metal, skylights, HVAC componentry, glass block, metal/plastic signs and marine hardware.
- Contractors SCS1000 sealant is useful for bedding and grouting of bathroom and kitchen tiles.
- Contractors SCS1000 sealant is useful as a seal around bathroom fixtures and countertops, air dryers and drains. When mold and mildew resistance is desired, consider Sanitary SCS1700.

# **Packaging**

Contractors SCS1000 sealant is available in 10.1 fl. oz. (299 ml) cartridges with either removable or fixed nozzles. Cases contain 24 cartridges.

#### **Colors**

Contractors SCS1000 sealant series is available in 4 standard colors and translucent:

Grade	Color
SCS1001	Translucent
SCS1002	White
SCS1003	Black
SCS1009	Aluminum (metallic)
SCS1097	Bronze

#### Limitations

#### Contractors SCS1000 sealant is not:

- For use underwater or in continuous contact with water.
- Paintable. When paintability is desired, consider SCS7000.
- · For use in Silicone Structural Glazing (SSG) Applications.
- · For use on mirrors.
- For use on wet, damp, frozen or contaminated surfaces.
- For use on masonry, sawn stone surfaces, lead, copper or brass.

#### **Technical Services**

Additional technical information or literature may be available by contacting Momentive Performance Materials<sup>1</sup> at 1-800-255-8886.

## **Applicable Standards**

GE Contractors SCS1000 sealant meets the requirements of the following specifications: ASTM: C920, Type S, Grade NS, Class 25. U.S. Federal: TT-S-001543A, TT-S-00230C. USDA: Momentive Performance Materials has on file documentation from USDA which states that GE Contractors SCS1001, SCS1002, SCS1003 and SCS1009 sealants are chemically acceptable for use on surfaces in official establishments operating under the Federal Meat and Poultry Inspection Program. GE Contractors SCS1097 sealant does not meet USDA acceptance criteria. For further information, contact Momentive Performance Materials Product Regulatory Compliance. The final granting of authorization for the proposed use of such compounds is the responsibility of the inspector in charge of the official plant. Technical assistance will be provided by the Product Safety Branch of USDA upon request. FDA: The following Contractors SCS1000 sealants/colors are in compliance with 21 CFR 177.2600, "Rubber articles intended for repeated use", 21 CFR 175.105 "Adhesives" and 21 CFR 175.300 "Resinous and Polymeric Coatings": SCS1001, SCS1002, SCS1003, SCS1009 and SCS1097. The use of these adhesive sealants is subject to the following conditions:

- The adhesive sealant is applied in accordance with Good Manfacturing Practice at a thickness not to exceed 6mm (1/4 inch) from an exposed edge.
- As a continuous film between joints acting as a functional barrier between the food and the substrate (area underneaththe joint).
- The adhesive sealant must be cured for a minimum of 14 days at 23°C (73°F) and 50% Relative Humidity.
- The operating temperature of the adhesive sealant aftercure must not exceed 177°C (350°F). The above sealants mentioned should be evaluated to determine bond strength for each specific substrate and application. If enhanced adhesion is desired, the evaluation of a primer is recommended. Only SS4179 primer may be used in repeated contact with food under 21 CFR 175.300. "Resinous and Polymeric Coatings" may be used. NSF: SCS1001, SCS1002, SCS1003 and SCS1009 sealants are listed under NSF International Standard No. F-51 "Plastic Materials and Components for use in Food Equipment" as satisfactory for use on splash zone surface.

# **Specifications**

Typical property values of SCS1000 silicone sealant as supplied and cured are set forth in the tables below. Typical product data values should not be used as specifications.

# **Typical Properties – Supplied**

	- 41	
Property	Value (1)	Test Method
Consistency	Paste	N/A
Polymer	100% Silicone	N/A
VOC	20 g/l	WPSTM C1454
Work Life (tooling time)	5-10 minutes	N/A
Tack Free Time (@ 73°F (23°C), 50% RH)	15-30 minutes	ASTM C679

# Typical Properties – Cured (after cure of 21 Days at 73°F (23°C) & 50% Relative Humidity)

Property	Value <sup>(1)</sup>	Test Method
Cure Time (1/4" or 6 mm deep section) @ 73°F (23°C) 50% RH	24 hours	N/A
Hardness, Durometer (Type A Indentor)	27	ASTM D2240
Service Temperature Range (after cure)	-55°F to +350°F (-48°C to 177°C)	N/A

<sup>(1)</sup> Average value. Actual value may vary.

# **Installation**

IN ALL CASES IT IS IMPORTANT TO CONFIRM THE ACCEPTIBILITY OF EACH SEALANT-SUBSTRATE COMBINATION WITH AN ADHESION TEST PRIOR TO PROCEEDING WITH USE. Some materials with variable surface characteristics may require the use of a primer to help obtain durable long-term adhesion. See Construction Primers datasheet.

# **Surface Preparation**

- Surfaces must be clean, dry and sound prior to application of the sealant. All contaminants, impurities, or other adhesion inhibitors (such as moisture/frost, oils, old sealants, soaps and other surface treatments, etc.) must be removed from the surfaces to which the sealant is intended to adhere.
- For cleaning, a solvent-dampened clean rag usually produces the desired result. Isopropyl Alcohol (IPA) is a commonly-used solvent and has proven useful for most substrates. When handling solvents, refer to manufacturer's MSDS for information on handling, safety and personal protective equipment.

#### **Masking**

The use of 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).

**Sealant Application** 

- Apply sealant in a continuous operation applying a positive pressure adequate to properly fill and seal the seam, cavity or joint.
- Tool or strike the sealant with an appropriate tool applying light pressure to spread the material against the joint surfaces for a neat application.
- Sealant application is not recommended when the temperature is below 40°F (4°C) or if frost or moisture is present on the surfaces to be sealed.
- Application of Contractors SCS1000 sealant is not recommended to surfaces above 120°F (49°C).

#### **Method of Application**

Contractors SCS1000 sealant is easily dispensed directly from cartridges using standard caulking guns or air operated guns. Maximum recommended pressure for air operated guns is 45 psig (3.2 kgs/cm2). Mixing, heating and refrigeration are not required.

#### **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 Contractors SCS1800 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.
- Sealant should only be applied to surfaces that are clean, dry and free of frost.

#### **Tooling**

- Tool or strike the sealant with a concave tool applying light pressure to spread the material against the back-up material and the joint surfaces to ensure a void-free application.
- On sill applications, tool the sealant to shed water and to eliminate ponding.
- Tooling agents such as water, soap, or detergent solutions are not recommended.

# **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.

# **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.momentive.com or, upon request, from any Momentive Performance Materials¹ representative. Use of other materials in conjunction with Momentive Performance Materials¹ products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

#### **Patent Status**

Nothing contained herein shall be construed to imply the non existence 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.

# **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	GE Branded 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 <sup>1</sup> at 518.233.2500	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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