

# Sanitary SCS1700

# **Product Description**

Sanitary SCS1700 silicone sealant is for use in areas prone to mildew formation such as around showers, tubs, and plumbing fixtures in high humidity areas and the cured sealant is mold & mildew resistant. Sanitary SCS1700 silicone sealant is a one-component, acetoxy cure silicone containing a fungicide and is useful on a wide variety of materials commonly found in locker rooms, swimming pool facilities and lavatories. Sanitary SCS1700 silicone sealant is supplied as a paste and upon cure, produces a durable, formed-in-place silicone rubber seal.

# **Typical Performance Properties**

- **Silicone Durability** Cured silicone provides excellent long-term resistance to natural weathering, humidity and high & low temperatures with negligible change in elasticity.
- **Cured Sealant Resists Mildew Growth** Contains a fungicide that enables the sealant to resist both mold and mildew even when exposed to prolonged hot and humid environments.
- **Fast Cure Time** Tack free in 30 minutes and full cure of many common bead sizes in 24-48 hrs minimizing wait time before placing into use.
- Adhesion Primerless adhesion to many substrates and finishes. May be considered a candidate for use with numerous materials, including: glass, ceramic, porcelain, tiles, stainless steel, numerous plastics, glazed surfaces, imitation marble, aluminum, and many composite materials. Some finishes or substrates may require a primer.
- ±25% Movement Capacity Can accommodate 25% movement in both extension and compression and has excellent recovery after cycling.
- **Stable Consistency (uncured state)** Supplied as a lightweight paste the consistency of which remains relatively unchanged over a wide temperature range. The paste can be easily gunned and tooled under hot and cold conditions.
- **Thermal Stability (cured state)** Once cured, the material properties remain fully elastic over a range of -55°F (-48°C) to 400°F (204°C).
- Low Sag or Slump Useful for application to horizontal, vertical or overhead surfaces.

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#### **Basic Uses**

- Sanitary SCS1700 silicone sealant is useful as a seal around bathtubs, shower stalls, wall fixtures, sinks, and other bathroom fixtures including countertops, soap fixtures, air dryers and drains.
- Sanitary SCS1700 silicone sealant is useful for grouting and bedding some ceramic tiles.
- Sanitary SCS1700 silicone sealant is useful in interior and exterior applications for areas prone to mold and mildew.

# Packaging

Sanitary SCS1700 silicone sealant is available in 10.1 fl. oz. (299 ml) plastic caulking cartridges with removable nozzles. Removable nozzles are easily transferred between cartridges for consistent bead size without having to re-cut each nozzle. Plastic cartridges are packaged as 24 units in cardboard boxes and are dispensed using a single component hand or air-pressured caulking gun.

# Colors

Sanitary SCS1700 silicone sealant is available in 2 standard colors.

Grade	Color	
SCS1701	.Translucent	
SCS1702	.White	
SCS1702	.Almond	

# Limitations

#### Sanitary SCS1700 silicone 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 use on aquariums as leaching of the fungicide can occur.
- For use on surfaces with special coatings, such as mirrors, without approval of the manufacturer of the article.

# Sanitary SCS1700 silicone sealant should not be applied or used:

- Under exceedingly hot or cold conditions (see Sealant Application section for additional information).
- On wet, damp, frozen or contaminated surfaces.
- On excessively basic or acidic substrates.
- On concrete, marble, limestone, lead or lead coated surfaces.

#### 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.
- Some materials that bleed plasticizers or oils can cause a discoloration on the surface of sealants. When sealing to or over items such as: rubberized gaskets, bituminous-based materials, butyl or oil-based products, oily woods, tapes, etc., Momentive Performance Materials<sup>1</sup> recommends that compatibility testing be performed prior to use to confirm the suitability of the use of these materials when in contact with each other.
- Silicone materials are hydrophobic in nature and if inadvertently over-applied onto adjacent joint surfaces (even if removed immediately), can create a waterproofing effect of a substrate when the substrate is wet. See section on Masking.

# **Technical Services**

Additional technical information and literature may be available from Momentive Performance Materials.<sup>1</sup> Laboratory facilities and application engineering are available upon request from Momentive Performance Materials.<sup>1</sup>

# Specifications

Typical property values of Sanitary SCS1700 silicone sealant as supplied and cured are set forth in the tables below. Typical product data values should not be used as specifications. Assistance with specifications is available by contacting Momentive Performance Materials<sup>1</sup> at 1-800-255-8886.

# **Typical Properties – Supplied**

Property	Value <sup>(1)</sup>	Test Method
Consistency	Paste	
Polymer	100% silicone	
VOC	20 g/l	WPSTM C1454
Work Life (tooling time)	5-10 minutes	
Tack Free Time (@ 72°F (22°C), 50% RH)	30-45 minutes	ASTM C679
Sag/Slump	0.1" max.	ASTM D2202

#### **Typical Properties – Cured**

Property	Value <sup>(1)</sup>	<b>Test Method</b>
Hardness, Durometer (Type A Indentor)	30	ASTM D2240
Ultimate Tensile Strength	292 psi (2.0 MPa)	ASTM D412
Ultimate Elongation	373%	ASTM D412
Peel Strength (average) (21-day cure @ 75°F (24°C) 50% RH)	30.4 pli (5.3 kN/m)	ASTM C794
Joint Movement Capability	±25%	ASTM C719
Service Temperature Range (after cure)	-55°F to +400°F (-48°C tp 204°C)	
Weathering and U.V. Resistance	Excellent	GE 20 yr. study
Cure Time ( <sup>1</sup> /4" or 6 mm deep section) @ 75°F (24°C) 50% RH	2-3 days	

(1) Average value. Actual value may vary.

#### **Applicable Standards**

Sanitary SCS1700 silicone sealant meets or exceeds the requirements of the following specifications:

#### American Society for Testing & Materials International

• ASTM C920 Standard Specification for Elastomeric Joint Sealants; Type S, Grade NS, Class 25, Use A, G, O

#### U.S. Federal Specifications: (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)

#### Canadian General Standards Board (inactive)

- CCGSB-19.13-M87 Sealing Compound, One-Component, Elastomeric, Chemical Curing
- CGSB-19.22-M89 Mildew-Resistant Sealing Compound for Tubs and Tiles

# **Suggested References**

In addition to the guidelines provided on this datasheet, Momentive Performance Materials<sup>1</sup> recommends that designers and users of Sanitary SCS1700 silicone sealant familiarize themselves with the latest editions of following industry guidelines and best practices:

1.) ASTM C1193 Standard Guide for Use of Joint Sealants.

# Installation

Sealants may not adhere or maintain long-term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application. Using proper materials and following prescribed surface preparation and cleaning procedures is vital for sealant adhesion. IN ALL CASES IT IS IMPORTANT TO CONFIRM THE ACCEPTIBILITY OF EACH SEALANT-SUBSTRATE COMBINATION WITH A LAB OR SITE ADHESION TEST PRIOR TO PROCEEDING WITH PROJECT INSTALLATION. Momentive Performance Materials<sup>1</sup> can provide lab adhesion testing information and suggestions to user upon request.

#### **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 non-porous substrates encountered in architectural construction applications. Xylene and Toluene have also been found useful on many substrates. When handling solvents, refer to manufacturer's MSDS for information on handling, safety and personal protective equipment.
- Architectural coatings, paints and plastics should be cleaned with a solvent approved by the manufacturer of the product or which does not harm or alter the finish.
- Since porous materials can absorb and retain moisture, it is important to confirm that substrates are dry prior to application of the sealant.
- Cleaning of surfaces should be done within 1 to 2 hours of when the sealant is to be applied.

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# Installation (continued)

#### Priming

Sanitary SCS1700 silicone sealant attains primerless adhesion to many commonly encountered construction materials. However, some materials with variable surface characteristics may require the use of a primer to help obtain durable long-term adhesion. Prior to use, trial applications should be made to check adhesion to the specific materials to be used on the project. See the GE sealants primer datasheets for product specific information on use and priming instructions. PRIMER APPLICATION IS NOT A SUBSTITUTE FOR SURFACE PREPARATION. Consult Momentive Performance Materials<sup>1</sup> Technical Services for sealant-primersubstrate recommendations.

**CAUTION:** Primers may contain solvents. 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 a concave tool applying light pressure to spread the material against the joint surfaces to ensure a void-free application.
- When tooling, use care not to spread the sealant over the face of the substrates adjacent to the joint or masking as the silicone can be extremely difficult to remove on rough or porous substrates. Excess sealant should be cleaned from glass, metal and plastic surfaces while still uncured. On porous surfaces the excess sealant should be allowed to progress through the initial cure or set-up. It should then be removed by abrasion or other mechanical means.
- Due to the smooth consistency of Sanitary SCS1700 silicone sealant, tooling agents such as water, soap, or detergent solutions are not necessary or recommended. Dry tooling is recommended.
- 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 Sanitary SCS1700 silicone sealant is not recommended to surfaces above 120°F (49°C).
- The cure rate of this product is dependent upon temperature and the availability of atmospheric moisture. Under Standard Conditions (relative humidity of 50 ±5% at an air temperature of 73.4 ±2°F [23 of ±1°C]) this material can attain a cured thickness of 2-3 mm per 24 hours (assuming ample access to atmospheric moisture). As temperature decreases, the cure rate slows down (and vice versa). Low moisture environments will also reduce the cure rate. Near-confined spaces, which limit the overall access to atmospheric moisture, will cure only from that surface which has access to the atmosphere.

#### **Method of Application**

Sanitary SCS1700 silicone 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/cm<sup>2</sup>). Mixing, heating and refrigeration are not required.

#### HANDLING AND SAFETY

Material Safety Data Sheets are available @ www.gesealants.com or, upon request, from a Momentive Performance Materials<sup>1</sup> representative. Similar information for solvents and other chemicals used with GE sealants products may be obtained from your suppliers.

#### **Storage Conditions and Warranty Period**

Sanitary SCS1700 silicone sealant should be stored in the original unopened container at 80°F (27°C) or lower. All users of this material are recommended to obtain and retain any invoices or other documentation relating to delivery and to manage their inventory on a FIRST IN / FIRST OUT basis. Applicable warranty information can be obtained from Momentive Performance Materials,<sup>1</sup> Waterford, NY, the GE sealants' sales office nearest to you, or an authorized GE sealants' product distributor.

#### Availability

Information on ordering can be obtained from Momentive Performance Materials,<sup>1</sup> Waterford, NY, the sales office nearest to you, or an authorized GE sealants' product distributor. For information regarding cost, contact your local distributor or territory manager. Our Customer Service number is: 877-943-7325.

#### **Government Requirement**

Prior to considering use of a GE sealants product in fulfilling any government requirement, please contact the Government and Trade Compliance office at: 413-448-4624.

#### **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 <u>www.momentive.com</u> or, upon request, from any Momentive Performance Materials<sup>1</sup> representative. Use of other materials in conjunction with Momentive Performance Materials<sup>1</sup> 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<sup>1</sup> 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	CHEMTREC: 800.424.9300
Canada	518.233.2500	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: 800.424.9300

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

# CUSTOMER SERVICE CENTERS

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	Consumer Sealants & Construction Sealants and Adhesives	<b>T</b> +1.877.943.7325	<b>F</b> +1.304.746.1654	
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	Mexico & Central America	<b>T</b> +52.55.5899.5135	<b>F</b> +52.55.5899.5138	
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