

Supreme Silicone Window & Door Sealant

Product Description

Supreme Silicone Window & Door sealant is a premium 100% silicone sealant with exceptional adhesion and flexibility. This sealant offers 50% joint movement capability and can withstand extreme expansion or contraction associated with wide temperature fluctuations. Ideal for a number of highly demanding exterior and interior projects, this durable sealant can be rain-ready in as little as 30 minutes, is resistant to UV degradation and has lifetime mold-free product protection. Supreme Silicone Window & Door sealant's airtight and permanently waterproof seal helps keep weather out and reduce energy consumption. Backed by a lifetime guarantee.

Product Attributes

- Meets ASTM C-920 Class 50 specifications
- 100% more flexibility than Class 25 sealants⁽¹⁾
- 7X stronger adhesion than GE Silicone 1* sealant⁽²⁾
- Resists mold⁽³⁾ with lifetime mold-free product protection
- 30-minute rain-ready⁽⁴⁾
- 100% silicone is 100% waterproof
- Will not discolor most high-end metal finishes such as chrome, bronze and nickel
- Will not break down due to extreme weather conditions, freeze & sun-proof
- Neutral cure with low odor
- Permanent flexibility
- Shrink-proof & crack-proof
- Excellent adhesion to wet and dry surfaces⁽⁵⁾
- Freeze/thaw stability
- Non-paintable

(1) Based on comparison of flexibility performance with ASTM C-920 Class 25 consumer sealants

(2) Based on comparison with our GE Silicone 1 sealant using ASTM C794 Peel Adhesion test.

(3) Fully cured sealant is resistant to stain-causing mold and mildew. Regular cleaning of sealant is required however, as soap and other residue can cause secondary mold and mildew growth.

(4) Exposure to water possible in as little as 30 minutes with bead size max 3/16", temperature min 65°F and humidity min 50%. Otherwise, sealant should not be exposed to water for 8 hours. Do not touch or clean sealant for 24 hours.

(5) Can be applied to damp or dry surfaces. For wet surfaces, wipe off excess water before applying. Do not apply to materials that are water saturated such as wood and concrete. Do not use in areas of ponding water.

*Silicone 1 is a trademark of Momentive Performance Materials Inc.



Basic Uses

Supreme Silicone Window & Door sealant is used in a wide variety of applications including, but not limited to windows, doors, siding, trim, vents, asphalt, cement, brick, mortar, and attic/basement applications.

Adheres To

Common building materials including most metals and wood, aluminum, composites, brick, stone, stucco, masonry, cement board, glass, porcelain, ceramic tile, drywall, plaster, vinyl siding, PVC, fiberglass, and painted surfaces, as well as metal finishes such as chrome, bronze & nickel.

Supreme Silicone Window & Door sealant should not be considered:

- For structural repairs
- 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
- For use on aquariums
- For use on surfaces with special coatings, such as mirrors, without approval of the article's manufacturer
- Under exceedingly hot or cold conditions (see Sealant Application section for additional information)
- On frozen or contaminated surfaces
- On excessively basic or acidic substrates
- For use on surfaces that are above 100°F (49°C)

Packaging

Supreme Silicone Window & Door sealant is currently available in 10.1 fl. oz. (299 mL) plastic caulking cartridges. Plastic cartridges are packaged as 12 units in cardboard boxes. Cartridges are dispensed using a single component hand or air-pressured caulking gun.

Supreme Silicone Window & Door Sealant

Model #	Stock #	Color	Product UPC	Size	Carton Size	Coverage (3/16" bead)
M90015	GESUPSILWD WHT	White	077027900156	10.1 fl. oz.	12 each	51 Linear Feet
M90016	GESUPSILWD CLR	Clear	077027900163	10.1 fl. oz.	12 each	51 Linear Feet



White



Clear

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.

Typical Properties

Typical physical property values of Supreme Silicone Window & Door sealant as supplied and cured are set forth in the tables below.

Typical Properties – Supplied

Property	Value	Test Method
Consistency	Paste	
VOC (ex. water & exempt)	< 35 g/L	WPSTM C1454
CARB Chem Curing (n.a.) VOC	< 3.0 wt%	
Odor	Light Ammonia	
Work Life (tooling time)	6-12 minutes	
Tack Free Time (@ 72°F (22°C), 50% RH)	30 minutes	ASTM C679
Rain-Ready	30 minutes	
Sag/Slump	< 0.1 inches	ASTM D2202

Typical Properties – Cured

Property	Value	Test Method
Hardness, Durometer (Type A Indenter)	19	ASTM D2240
Tensile Strength	227 psi	ASTM D412
Elongation	483%	ASTM D412
Specific Gravity	1.02	
Joint Movement Capability	±50%	ASTM C719
Service Temperature Range (after cure)	-60°F to +400°F (-51°C to 204°C)	
Weathering and U.V. Resistance	Excellent	30 year Study
Full Cure Time	24 hours	

Typical properties are average data and are not to be used as or to develop specifications.

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 that has shown to be effective with most non-porous substrates. When handling solvents, refer to manufacturer's SDS 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.

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).

Instructions

1. Remove dirt, grease, moisture, soap residue & old caulk from area to be sealed. Use backer rod for gaps larger than 1/2" x 1/2" (12.7mm x 12.7mm).⁽¹⁾
2. Cut nozzle to obtain desired bead size.
3. PIERCE INNER FOIL SEAL.
4. Using caulk gun, apply sealant into gap. Smooth the sealant into gap.
5. Wipe hands & tools thoroughly before washing.
6. Allow a minimum of 30 minutes before exposing sealant to water (See Product Attributes above).

(1) Sealant depth should be controlled with a closed cell, non-gassing type backer rod. Backer rod should be slightly larger in diameter (25 to 50%) than the joint width.

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 from 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.
- If sealant is applied when the temperature is below 40°F (4°C) or if frost or moisture is present on the surfaces to be sealed, the rate of cure will slow. For standard cure speed, apply in temperatures above 40°F.
- The cure rate of this product is primarily dependent upon temperature and the availability of atmospheric moisture. Under average conditions (relative humidity of 50 ±5% at an air temperature of 73.4 ±2°F [23 ±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.

Note:

- This material requires atmospheric moisture to cure from a paste to a rubber consistency, 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., compatibility testing prior to use is recommended.
- 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.

Specifications

Meets ASTM C-920, Type-S, NS, Class 50, Use A, G & O Test Requirements.
Requirements. Federal Specification TT-S-00230C, TT-S-001543A

Suggested References

In addition to the guidelines provided herein, Momentive Performance Materials recommends that designers and users of Supreme Silicone Kitchen & Bath sealant familiarize themselves with the latest editions of following industry guidelines and best practices:

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

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Safety Data Sheets are available at www.GEsealants.com or, upon request, from any MPM representative. Use of other materials in conjunction with MPM sealants 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 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.

Limitations

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

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