



Technical Data Sheet

Revision: March 1, 2023
Supersedes: New
Ref. #: 703664, 703665, 703666,
703667, 703681, 703683

Supreme Silicone Window & Door Sealant



DESCRIPTION

GE branded Supreme Silicone Window & Door Sealant is a premium, 100% silicone sealant with outstanding adhesion that provides a reliable seal in weather-prone areas like windows, doors, basements, siding, and attics. Ideal for exterior weatherproofing projects, this durable sealant is 100% waterproof, water-ready in as little as 30 minutes, and offers 50% joint movement capability to withstand extreme expansion or contraction associated with temperature fluctuations without cracking, shrinking, breaking down or washing away. This sealant has lifetime mold-free product protection and is backed by a lifetime guarantee.

Available as:

Item #	Country	Package	Size	Color
2814819	USA	Plastic cartridge	10.1 fl. oz. (299 ml)	White
2814816	USA	Plastic cartridge	10.1 fl. oz. (299 ml)	Clear
2821636	USA	Plastic cartridge	10.1 fl. oz. (299 ml)	Almond
2821639	USA	Plastic cartridge	10.1 fl. oz. (299 ml)	Grey
2821635	USA	Plastic cartridge	10.1 fl. oz. (299 ml)	Brown
2821634	USA	Plastic cartridge	10.1 fl. oz. (299 ml)	Black
2814815	USA	Plastic squeeze tube	2.8 fl. oz. (83 ml)	Clear
2814821	Canada	Plastic cartridge	10.1 fl. oz. (299 ml)	White
2814820	Canada	Plastic cartridge	10.1 fl. oz. (299 ml)	Clear

FEATURES & BENEFITS

- 100% Silicone
- 100% Weatherproof
- Lifetime mold-free product protection ^[2]
- Meets ASTM C-920, Class 50
- 30-minute water-ready ^[1]
- Shrink & crack-proof
- Lifetime guarantee
- Neutral curing with low odor
- Won't blemish most high-end metal finishes like chrome, bronze & nickel
- 100% more flexibility than Class 25 sealants ^[3]
- Ideal for exterior weatherproofing projects
- Resists UV degradation
- Non-paintable

RECOMMENDED FOR

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. It may be used on common building materials including most metals and wood, aluminum, many plastics, 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.

LIMITATIONS

Should not be considered:

- Where painting of sealant is needed
- For use underwater or in other applications where the product will be in continuous contact with water
- For use in food contact applications (direct or indirect)
- For use in aquariums
- For use under shower door tracks, or as a spackling compound
- On frozen or contaminated surfaces
- Under exceedingly hot or cold conditions
- For structural repairs
- On excessively basic or acidic substrates
- For use on galvanized surfaces, or special coatings, such as mirrors, without approval of the article's manufacturer



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COVERAGE

For a 10.1 fl. oz. (299 ml) cartridge:

- A 3/16" (5 mm) bead extrudes approx. 51 ft. (15.5 m)
- A 3/8" (9.5 mm) bead extrudes approx. 13.7 ft. (4.2 m)

For a 2.7 fl. oz. (83 ml) squeeze tube:

- A 3/16" (5 mm) bead extrudes approx. 13 ft. (4 m)
- A 3/8" (9.5 mm) bead extrudes approx. 3.7 ft. (1.1 m)

TECHNICAL DATA

Typical Uncured Physical Properties		Typical Application Properties	
<u>Colors:</u>	White, Almond, Grey, Brown, Black, or Clear/colorless	<u>Application Temperature:</u>	Surface and ambient temperatures must be above 40°F (5°C) and below 100°F (38°C)
<u>Appearance:</u>	Non-slumping paste	<u>Odor:</u>	Light Alcohol
<u>Base:</u>	Neutral cure Silicone	<u>Tooling / Open Time:</u>	5-10 minutes*
<u>VOC Content:</u>	2.3% by weight CARB 27 g/l SCAQMD rule 1168	<u>Skin Time / Tack Free:</u>	30 minutes*
<u>Shelf Life:</u>	18 months from date of manufacture (unopened) Use by date is printed on cartridge or on crimping of squeeze tube	<u>Cure Time:</u>	24 hours*
		<u>Clean Up:</u>	Clean uncured sealant residue immediately using mineral spirits. Cut or scrape away cured sealant using a sharp-edged tool.

*At 73°F (23°C) and 50% relative humidity. Time is dependent on temperature, humidity, porosity of substrates and depth of sealant applied. Cure time is significantly increased in cold temperatures and/or low humidity conditions.

Typical Cured Performance Properties

<u>Colors:</u>	White, Almond, Grey, Brown, Black, or Clear/Colorless**	<u>Service Temperature:</u>	-60°F to 400°F (-51°C to 204°C)
<u>Cured form:</u>	Non-flammable, rubbery solid	<u>Shore A Hardness:</u>	19
<u>Water Resistant:</u>	Yes, 30-minute water ready ^[1]	<u>Elongation at Break:</u>	483%
<u>Paintable:</u>	No	<u>Tensile Strength at Break:</u>	227 psi
<u>Movement Capability:</u>	± 50%		
<u>Specifications:</u>	Meets the performance requirements of: ASTM C-920, Type-S, Grade NS, Class 50, Use G & O test requirements		

**Clear/colorless is not descriptive of sealant transparency. Thickness of applied bead will impact clarity of the cured product.

DIRECTIONS

Tools Typically Required:

Utility knife, caulking gun, and tool to puncture cartridge seal.

Safety Precautions:

Wear gloves and wash hands after use.

[1] Exposure to water possible in 30 minutes with bead size max 3/16" (4.8 mm), temperature min 65°F (18.3°C) and humidity min 50%. Otherwise, sealant should not be exposed to water for 8 hours. Do not touch or clean sealant for 24 hours, or until fully cured.

[2] Fully cured sealant is resistant to stain-causing mold & mildew. Regular cleaning of sealant is required however, as soap and other residue can cause secondary mold and mildew growth on surfaces.

[3] Based on ASTM C-920, TYPE-S, NS, CLASS 50 analysis, product can span gaps of up to 5/8" x 5/8" with over 483% elongation and 50% joint movement.



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DIRECTIONS

Surface Preparation:

- The temperature of the product, any surfaces, and the working area must be above 40°F (5°C). For best performance, apply sealant at 70°F (21°C). It is recommended to store product at room temperature at least 24 hours before use during extreme cold weather conditions.
- Check "Use By" date on product container. If expired product is applied, the sealant may have difficulty curing, or may not cure at all, and may need to be removed. See instructions on sealant removal.
- All surfaces, including new construction, must be clean, dry, and sound prior to application of the sealant. All contaminants, impurities, or other adhesion inhibitors (such as old sealants, dirt, oils, soap residue, and other surface treatments, etc.) must be removed from surfaces to which the sealant is intended to adhere to. Surface preparation should be completed on the same day product is being applied, preferably within 1 – 2 hours before sealant is to be applied, to allow surfaces to dry.

If existing UNCURED sealant needs to be removed:

Remove (scrape, wipe, dig out, etc.) uncured sealant and then scrub the area with isopropyl alcohol (IPA)[†] to remove any remaining oily residue.

If existing CURED / OLD sealant needs to be removed:

Remove as much as possible by cutting/peeling/scraping excess caulk from the surface.

For ceramic tile, marble, Formica®, fiberglass, etc.: use 100 percent mineral spirits (turpentine)[†] and a non-abrasive scouring pad. Test mineral spirits[†] on a hidden area of the surface to ensure discoloration will not occur. If discoloration does occur, contact the manufacturer of the surface for further assistance.

For glass surfaces: carefully use a razor blade within a holder to remove as much as possible, then apply mineral spirits[†]. Remove excess with a towel or other suitable cleaning utensil that will not mark the surface (such as a nonabrasive pad).

For hard plastics or painted surfaces: use rubbing alcohol[†] and a soft cloth. Do not use mineral spirits[†].

For porous/rough surfaces (concrete, brick, wood, wallpaper): remove as much of the sealant as possible (same as smooth surface). If necessary, use a wire brush in conjunction with mineral spirits[†]. We do not recommend use of a wire brush to remove sealant from wood surfaces, as doing so could damage the wood. Also, mineral spirits[†] should not be used if wood has any type of finish on it. Test solvent on a hidden area before applying.

Special notes about silicone sealant: There is no substance that will dissolve silicone. If you are reapplying silicone to the area, remove the old sealant, and then clean the area as detailed below. If mold or mildew is present, apply rubbing alcohol[†]. Let the area dry before reapplying silicone.

- Surfaces which sealant are to be applied on need to be prepared properly. The following are guidelines for preparing a variety of surfaces:

Concrete, masonry, and stone: use a wire brush to remove old caulk/sealant, dirt, dust, and loose particles. All contaminants and impurities must be cleaned off, such as concrete form release agents, water repellents, and other surface treatments and protective coatings.

Porous surfaces: use sandpaper or a wire brush where necessary to provide a sound, clean surface. Since porous materials can absorb and retain moisture, it is important to confirm that substrates are dry prior to application of sealant.

Metal, glass, and plastic: clean surface with a solvent such as mineral spirits[†] or a lacquer thinner[†]. When using solvents, always wipe the surface dry with a clean cloth or lintless paper towels. Never allow a solvent to air dry or evaporate without wiping. Isopropyl alcohol (IPA)[†] is a commonly used solvent that has shown to be effective with most non-porous substrates.

Architectural coatings, paints, and plastics: Clean with a solvent[†] approved by the manufacturer of the product, or which does not harm or alter the finish.

Note: cleaning surfaces with detergent or soap and water is not recommended as silicone will not adhere to surfaces with any soap scum/residue present.

- Some materials, such as concrete, soft woods, stone, specially treated metals, plastics, or other man-made materials, might have unpredictable surface characteristics. Therefore, we recommend testing for adhesion by applying the caulk/sealant to a small area before proceeding with an entire job.
- Some materials may cause discoloration on the surface of sealant/substrate. Compatibility testing prior to use is recommended.
- Use backer rod for gaps larger than 3/8" D x 3/8" W (9.5mm x 9.5mm). Sealant beads should not be thicker than 1/2" (12.7mm) or thinner than 1/8" (3.2 mm), using a width-to-depth ratio of 2:1.

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 (see Tooling / Open time).

[†]Mineral spirits and alcohol are flammable and should be used away from sparks, flames, and other ignition sources. Only use solvents in a well-ventilated area and follow all safety precautions and instructions listed on the product label or as otherwise provided by the manufacturer.



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DIRECTIONS

Application:

- Cut nozzle to obtain desired bead size and pierce inner foil seal. For squeeze tube, remove cap and cut nozzle.
- Using a caulking gun (for cartridge use), apply sealant in a continuous operation applying a positive pressure adequate to properly fill and seal the seam, cavity, or joint.
- Smooth or tool the sealant into gap within 5–10 minutes of application. Tool or strike the sealant with a concave tool, or water moistened, gloved finger applying light pressure to spread the material against the joint surfaces to ensure a void-free application. Do not over tool or tool too thin. Doing so will have a negative impact on sealant integrity and performance. Sealant skins over in approximately 30 minutes, depending on humidity and temperature.
- When tooling, use care not to spread the sealant over the face of the substrates adjacent to the joint or masking as Supreme Silicone Window & Door Sealant 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, 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.
- In near-confined spaces, which limit overall access to the atmosphere, sealant will cure only from that surface which has access to the atmosphere. Do not encapsulate sealant between two non-porous substrates.

NOTE:

- 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.
- If Supreme Silicone Window & Door 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 (4°C).
- The cure rate of this product is primarily dependent upon temperature and the availability of atmospheric moisture. Under average conditions (relative humidity of 50% at an air temperature of 73°F (23°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.
- Users must evaluate GE branded products and make their own determination as to fitness of use in their specific application. It is the user's responsibility to test substrate compatibility, and adhesion of the cured sealant on a test joint before applying to the entire project.
- In addition to the guidelines provided in this datasheet, Henkel Corporation recommends designers and users of Supreme Silicone Sealant familiarize themselves with the latest editions of the following industry guidelines and best practices:
 - ASTM C1193 Standard Guide for Use of Joint Sealants.

Clean up:

Clean uncured sealant residue immediately using mineral spirits[†] or paint thinner[†]. Cut or scrape away cured sealant using a sharp-edged tool. For removal from specific surfaces, refer to section on "Surface Preparation" for additional information.

STORAGE & DISPOSAL

NOT DAMAGED BY FREEZING. Store unopened containers in a cool, dry, well-ventilated area away from heat, sparks, and direct sunshine under standard conditions. Standard storage conditions are defined as 72 ± 4°F (22 ± 2°C) and < 50% relative humidity. Elevated temperatures or extreme cold temperatures will reduce shelf life. In cool or cold weather, store container at room temperature for at least 24 hours before using. Keep container tightly closed until ready for use. Use an approved hazardous waste facility for disposal. Hardened material may be disposed of in the trash.



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LABEL PRECAUTIONS

WARNING! UNCURED SEALANT MAY IRRITATES EYES, SKIN, AND RESPIRATORY TRACT.

CAUTION! Contains petroleum distillates, ethoxy terminated silsesquioxanes, and silanes. Methanol is released during application and cure, which may affect the nervous system causing dizziness, headache, or nausea. Prolonged or repeated skin contact with uncured product may cause irritation. Do not get in eyes on skin or clothing. Gloves are recommended to prevent skin contact. Remove contact lenses before using. Wear safety glasses. Use with adequate ventilation. Do not swallow.

FIRST AID: For eye contact flush immediately with water for 15 minutes. Seek medical attention immediately. Call a physician if irritation develops and persists. For skin contact, wipe off with paper towel or cloth. Wash with water and soap immediately. If affected by inhalation, move to fresh air and get medical attention if symptoms develop or persist. If ingested, DO NOT induce vomiting; call a physician or Poison Control Center immediately. **DO NOT TAKE INTERNALLY.**

KEEP OUT OF THE REACH OF CHILDREN.

 **WARNING:** Reproductive Harm – www.P65Warnings.ca.gov

Refer to the Safety Data Sheet (SDS) for further information

DISCLAIMER

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Henkel recommends purchasers/users should test the products to determine acceptable quality and suitability for the intended use. All adhesive/sealant applications should be tested under simulated or actual end use conditions to ensure the adhesive/sealant meets or exceeds all required project specifications. Since assembly conditions may be critical to adhesive/sealant performance, it is also recommended that testing be performed on specimens assembled under simulated or actual production conditions. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

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Founded in 1876, Henkel is a global leader in the consumer and industrial businesses. Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care (Consumer Brands) and Adhesive Technologies.

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