

All Purpose Silicone 1* Sealant

Product Description

All Purpose Silicone 1 sealant is 100% waterproof and ideal for a wide range of projects exposed to harsh weather from the attic to the basement. Permanently flexible, it can stretch and move with expansion and contraction and will never break down due to ultraviolet rays or freezing temperatures. This high-quality sealant is resistant to unsightly stain causing mildew growth. It's easy to apply and offers excellent adhesion to many common building materials including most wood, metal, vinyl siding, drywall/plaster, glass, and plastic. Backed by a lifetime guarantee.

Product Attributes

- Resists mold⁽¹⁾ with 7-year mold-free product protection
- Same-day rain and water-ready
- Full cure in 24 hours
- 100% silicone is 100% waterproof and 100% weatherproof
- Sun-proof and freeze-proof
- Meets ASTM C-920 Class 25 specifications
- Permanently flexible
- Never cracks, shrinks, breaks down, or washes away
- Freeze/thaw stability
- Non-paintable



(1) 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.



Basic Uses

All Purpose Silicone 1* sealant is used in a wide variety of applications including, but not limited to, windows, doors, siding, trim, and vents, as well as attic/basement applications.

Adheres To

Common building materials including most metals and woods, aluminum, composites, brick, stone, stucco, masonry, cement board, glass, porcelain, ceramic tile, drywall, plaster, vinyl siding, PVC, fiberglass, and painted surfaces.

All Purpose Silicone 1 sealant should not be considered:

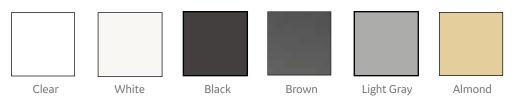
- For structural repairs
- For use underwater or in other applications where the product will be in continuous contact with water
- When painting of the cured sealant is desired
- For use on aquariums
- For use on surfaces with special coatings, such as mirrors, without approval of the article's manufacturer
- 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 120°F (49°C)

Packaging

All Purpose Silicone 1 sealant is currently available in 10.1 fl. oz. (299 ml) plastic caulking cartridges. Cartridges are available with fixed nozzles. Plastic cartridges are packaged as 12 units in cardboard boxes. Cartridges are dispensed using a single component hand or air-pressured caulking gun.

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Stock #	Model #	Color	Product UPC	Size	Carton Size	Coverage (³ /16" bead)
GESIL1WD CLR	GE012A	Clear	077027000122	10.1 fl. oz.	12 each	51 Linear Feet
GESIL1WD WHT	GE112A	White	077027001129	10.1 fl. oz.	12 each	51 Linear Feet
GESIL1WD BLK	GE312A	Black	077027003123	10.1 fl. oz.	12 each	51 Linear Feet
GESIL1WD BRZ	GE412A	Bronze	077027004120	10.1 fl. oz.	12 each	51 Linear Feet
GESIL1WD LGR	M90076	Light Gray	077027900767	10.1 fl. oz.	12 each	51 Linear Feet
GESIL1WD ALM	M90075	Almond	077027900750	10.1 fl. oz.	12 each	51 Linear Feet

All Purpose Silicone 1 Sealant





Typical Properties

Typical physical property values of All Purpose Silicone 1* 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)	< 36 g/L	WPSTM C1454
CARB Chem Curing (n.a.) VOC	< 3.0 wt%	
Odor	Acetic Acid (Vinegar)	
Work Life (tooling time)	5-10 minutes	
Tack Free Time (@ 72°F (22°C), 50% RH)	30 minutes	ASTM C679
Rain-Ready	12 hours	
Sag/Slump	< 0.1 inches	ASTM D2202

Typical Properties - Cured

Property	Value	Test Method
Hardness, Durometer (Type A Indenter)	25	ASTM D2240
Tensile Strength	213 psi	ASTM D412
Elongation	328%	ASTM D412
Specific Gravity	1.02	
Joint Movement Capability	±25%	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 and has proven useful for 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 mimimum of 12 hours before exposing sealant to water.
- (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 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.
- If sealant is applied when the temperature is below 32°F (0°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 32°F.
- The cure rate of this product is 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 generally allow cure only at that surface which has access to the atmosphere.

Note:

- 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., 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 25, Use NT, M, G, A & O Test Requirements. Federal Specification TT-S-00230C, TT-S-001543A

All Purpose Silicone 1* sealant is compliant for incidental food contact under FDA 21 CFR177.2600"Rubber articles intended for repeated use."

Suggested References

In addition to the guidelines provided herein, Momentive Performance Materials recommends that designers and users of All Purpose Silicone 1 sealant familiarize themselves with the latest editions of the 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 <u>www.GEsealants.com</u> 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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