



TECHNICAL DATA SHEET

WINDOW, DOOR & SIDING SEALANT



Description: OSI® QUAD® Max is the next generation of siding, window and door sealants that offers maximum durability and application performance for use in many interior or exterior conditions. QUAD Max takes the guess work out of color matching with over 4,600 color matches to primary building material manufacturers. It has been proven to stick on wet and cold surfaces and offers long term durability against the harmful effects of sun exposure. traditional solvent sealants, QUAD Max is resistant to bubbling and has no shrinkage. By providing superior protection against air and moisture, you've done it right the first time.

Available As:

Item #	Size	Color
Various	9.5 fl oz (280 ml) cartridge	4,600+ Color Matches
2058483	19.2 fl oz (568 ml) sausage	White (001)

Features & Benefits:

- Proven Wet Surface Application
- Better Flexibility: 5x Stretch & ± 50% Joint Movement
- Consistent Bead in Hot or Cold Temperatures: 0°F to 140°F Application
- 24 Hour Fast Cure for Quicker Protection*
- Available in 4,600+ Color Matches
- Paintable in 1 Hour
- Strong Adhesion to More Building Materials Without Primer
- Enhanced UV Resistance

Recommended For:

OSI QUAD Max is designed for interior/exterior use for sealing around windows, doors and siding. It bonds to a wide variety of materials with for a primer such as fiber cement, cedar, brick, stone, coated aluminum, steel, fiberglass, vinyl, PVC, stucco, EIFS, wood, glass, concrete, flashing tapes and Kynar® coatings.

For Best Results:

- Do not use on joints immersed in water or applications requiring continuous water immersion
- Do not use as a traffic bearing sealant or in log homes
- For joints deeper than 3/8" (9.5 mm), a backing material should be used
- Light tooling is permitted but excessive smearing of the sealant beyond the joint will limit UV resistance and can cause premature fading. Thin smears by using masking tape.
- Not for use for nail hole filling with prefinished siding. Follow siding manufacturer's recommendations for nail hole filling.

**Note: Current label states not for use on polystyrene foams but this product has been tested and proven to be compatible with this material.

Coverage:

For a 9.5 fl. oz. (280 ml) cartridge:	For a 19.2 fl. oz. (568 ml) sausage:
• A 1/4" (6 mm) bead extrudes approximately 29.1 ft. (8.9 m)	• A 1/4" (6 mm) bead extrudes approximately 58.8 ft. (17.9 m)
• A 3/8" (9.5 mm) bead extrudes approximately 13.3 ft. (4 m)	• A 3/8" (9.5 mm) bead extrudes approximately 26.9 ft. (8.2 m)



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Typical Uncured Physical Properties:

Color:	Various colors - 4,600 color matches listed on ositough.com	
Appearance:	Non-slumping paste	
Base:	Silane Modified Polymer	
Odor:	Alcohol	
Specific Gravity:	1.4 – 1.5	
Flash Point:	224.6° F (107° C)	
VOC Content:	2.48% by weight	CARB
	36 g/l	SCAQMD rule 1168
Shelf Life:	24 months from date of manufacture (unopened)	Under cool, dry storage conditions
Lot Code Explanation:	YYDDD YY= Last two digits of year of manufacture DDD= Day of manufacture based on 365 days in a year Example: 14061 = 61 st day of 2014 = March 2, 2014	

Typical Application Properties:

Application Temperature:	Apply between 0°F (-18°C) and 140°F (60°C) For easier extrusion of sealant at lower temperatures, store cartridge at room temperature at least 24 hours prior to use	
Skin Formation Time:	20-30 minutes*	At 72°F and 70% relative humidity
Cure Time:	24-72 hours*	
	*Cure time is dependent on temperature, humidity and depth of sealant applied	
Extrusion Rate:	42 ml/min	ASTM C1183 (Procedure A)
Vertical Sag:	0 inches	ASTM C639

Typical Cured Performance Properties:

Color:	Various colors	
Service Temperature:	-14°F (-25°C) to 158°F (70°C) -50°F (-45°C) to 300°F (149°C)	Long Term (Continuous) Exposure Short Term (Intermittent) Exposure
Water Resistant:	Yes	
Paintable:	Yes, with latex paint	
Nail-Hole Filling:	Suitable when painted except for use on prefinished siding	
Bubble Resistant:	Yes	
Hardness:	32	ASTM C661
Joint Movement:	± 50%	ASTM C719
Tensile Strength:	234 psi	ASTM D412
Maximum Elongation:	577%	ASTM D412
180° Peel Adhesion:		ASTM C794
PVC Trim:	47.6 lb/in	
Fiber Cement:	47.0 lb/in	
Coated (Painted) Aluminum:	51.1 lb/in	
Vinyl Siding:	54.7 lb/in	
Mortar:	42.0 lb/in	
Specifications:	Meets the performance requirements of: <ul style="list-style-type: none"> • ASTM C 920: Type S, Grade NS, Class 50 • Federal Spec. TT-S-00230C, Type II • AAMA 800 & AAMA 713-08 • ASTM C1382 (EIFS) • GreenGuard® Certified 	



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Directions:

Tools Typically Required: Utility knife and caulking gun. For best application results, OSI recommends the use of a high quality caulking gun such as the Albion® B12 Cartridge Gun.

Safety Precautions: Wear gloves and wash hands after use.

Surface Preparation: Ensure all surfaces are clean and free of old caulk, grease, dust, ice, snow, frost, surface water and other contaminants. While QUAD Max is generally considered a non-priming sealant, special circumstances or substrates may require a primer. It is the user's responsibility to test substrate compatibility and the adhesion of the cured sealant on a test joint before applying to the entire project.

Masonry: Concrete, stone, stucco and other masonry must be cleaned where necessary by grinding or wire brushing to expose a sound surface free of contamination and laitance. Concrete must be fully cured and free of release agents.

Wood and painted wood: New and weathered wood must be clean and structurally sound. Cut back weathered surfaces and dry rot until clean, sound wood is reached. Scrape away paint to bare wood. Any coating that cannot be removed must be tested to verify adhesion of the sealant. QUAD Max will adhere to most new and old, dry, oil-free wood.

Metal: Remove scale, rust, and residue from metal to expose a bright metal sheen by wire brushing. Remove any chemical residue, film/oils, and loose or incompatible coatings using the appropriate solvent. Any coating that cannot be removed must be tested to verify adhesion of the sealant. Remove any other coatings or finishes that could interfere with adhesion. An adhesion test is recommended for anodized aluminum or any questionable substrates.

Joint Preparation: The number of joints and the joint width should be designed for a maximum of ± 50% joint movement from the initial joint width. The depth of the sealant joint should be one-half the width of the joint. The maximum depth is ½ inch (13 mm) and the minimum is ¼" (6 mm). The maximum recommended joint width is 5/8" inches (15 mm). See table below.

Joint Width (inches)	Sealant Depth @ Midpoint (inches)
1/4	1/4
1/2	1/4
5/8	1/2

Joint Width (mm)	Sealant Depth @ Midpoint (mm)
6	6
13	6
15	13

If the depth of the joint exceeds 3/8" (9.5 mm) the use of a backer rod such as a Closed-Cell Backer-Rod or Soft Backer-Rod is recommended. Where the joint depth does not permit the use of backer-rod, a bond breaker (polyethylene strip) must be used to prevent three-sided adhesion. To maintain the recommended sealant depth, install backer-rod by compressing and rolling it into the joint channel without stretching it lengthwise. Closed-Cell Backer-Rod should be approximately 1/8" (3 mm) larger in diameter than the width of the joint to allow for compression. Soft Backer-Rod should be approximately 25% larger in diameter than the joint width. Backer-rod becomes an integral part of the joint. The sealant does not adhere to it, and no separate bond breaker is required. Do not prime or puncture the backer-rod.

General Preparation: The temperature of the product, the surfaces and the working area should be between 0°F (-18°C) and 140°F (60°C). For best performance, store cartridge at room temperature at least 24 hours before use. Cut plastic nub of cartridge then screw on plastic nozzle. Insert cartridge into caulking gun, cut nozzle at a 45° angle to desired bead size (3/8" is recommended for optimal joint protection).

Application: Using a caulking gun, apply sealant with steady pressure, forcing sealant into joint. If the depth of the joint exceeds 3/8" (9.5 mm) the use of a backer rod is recommended. QUAD Max will not pop or splatter and will dispense smoothly on extrusion from the cartridge. Always apply sealant in a bead form. Light tooling is permitted with QUAD Max but excessive tooling or spreading sealant into a thin film will reduce the sealants ability to withstand UV exposure and joint movement which will effect overall durability. If masking tape is used along the sides of the joint to prevent surface smearing, ensure the tape is removed immediately after tooling by pulling the tape away in a clean smooth even line. Full cure may take 24-72 hours or longer depending on ambient conditions and volume of sealant used. Sealant is paintable in 1 hour. Latex paint is recommended. If using oil based/alkyd paint, a latex primer should be used first.

Users can refer to ASTM C1193 – Standard Guide for Joint Sealants for further installation/application information. Henkel recommends that you test all sealant applications under simulated or actual end use conditions to ensure the product meets or exceeds all required project specifications. Since assembly conditions may be critical to the product's performance, it is also recommended that testing be performed on specimens assembled under simulated or actual production conditions.

Clean-up: Clean tools and uncured sealant residue immediately with mineral spirits or paint thinner. Cured sealant must be carefully cut away with a sharp-edged tool.



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Storage & Disposal:

NOT DAMAGED BY FREEZING. For optimal shelf life, store in a cool, dry place in a tightly closed container. Do not let moisture contaminate product. Product reacts with water to release carbon dioxide which could build up pressure in the contained. Take unwanted product to an approved household hazardous waste transfer facility. Hardened material may be disposed of with trash.

Label Precautions:

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

WARNING! Contains vinyl trimethoxysilane. May be harmful if inhaled or swallowed. Methanol is released during application and cure, which may affect the nervous system causing dizziness, headache or nausea. Use in a well-ventilated area. Do not breathe vapors. Avoid eye and skin contact. Prolonged or repeated skin contact with uncured sealant may cause irritation. Wear gloves and safety glasses when applying product. Remove contact lenses before using sealant. Wash hands after using. **FIRST AID:** For eye contact flush with water for 15 minutes. Call a physician if irritation develops and persists. For skin contact, wash thoroughly with soap and water. If affected by inhalation, remove to fresh air and get medical attention. 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: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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

Limited Warranty:

This product is warranted to be free from defects in materials when used as directed. Henkel's sole obligation shall be, at its option, to replace or refund the purchase price of product proven to be defective. Henkel makes no other warranty, express or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE and will not be liable for consequential or incidental damages. This limited warranty gives you specific legal rights, which vary from state to state. Henkel may be contacted at 1.800.624.7767 M-F 9:00 am to 4:00 pm ET for warranty assistance.

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. Purchasers should test the products to determine acceptable quality and suitability for their own intended use. 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.



OSI Tougher than the Elements. For Professional Use Only. The Battle will be Fierce.

OSI works side by side with residential builders, contractors and remodeling professionals who use our products everyday on their jobsites. OSI combines this deep understanding with the sophisticated global innovation and manufacturing excellence of Henkel to make the world's best professional-grade caulks, sealants and adhesives.

1-800-624-7767 – Mon-Fri - 9:00a – 4:00p ET

www.ositough.com



OSI Brand is part of the Henkel family of brands. 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 and Adhesive Technologies.

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