



TECHNICAL DATA SHEET

Revision: Feb 27, 2020
Supersedes: Aug 13, 2018
Ref. #: 232594

WINDOW & DOOR INSTALLATION FOAM



DESCRIPTION

OSI QUAD Foam Gun or Straw is a single component, minimal expansion, low pressure polyurethane foam designed for Window and Door installations. It is packaged in a pressurized can, with a unique adaptor that allows both gun and straw application. Use with the straw is great for small jobs that require a single can and offers improved structure versus traditional straw foams. For larger jobs and heavy users, gun application is recommended, due to the ergonomic design of the gun, the ability to use the full can by re-sealing it for later use, and precision control to adjust the bead size. OSI QUAD Foam exhibits slight to moderate expansion during application and cures upon reaction with moisture to form a flexible, urethane foam. The closed cell structure of this material provides an R factor of 5 per inch of cured foam making it an efficient method for stopping air and moisture infiltration and expensive warm and cold air loss between windows and rough frame. It will not warp or deform windows and doors. OSI QUAD Foam Gun or Straw adheres to all types of building materials including wood, concrete, and drywall and is compatible with asphalt and butyl flexible flashing. It complies with all Federal and State VOC regulations.

Available As:

Item #	Size	Color
1927125	16 oz (453 ml) can	Tan

FEATURES & BENEFITS

- Low Foam Pressure/Low Expansion – will not warp or deform windows and doors
- Convenient Gun or Straw Application
- Quick Setting Formulation – can be cut or trimmed in less than 1 hour
- Cold Temperature Application (14°F)
- Insulation Value of R4.1 to 5 per inch
- Closed Cell Structure Does Not Absorb Moisture
- Flexible/Will Not Crack or Dry Out
- Reusable straw that can be cleaned with OSI Foam Gun Cleaner

RECOMMENDED FOR

OSI QUAD Foam Gun or Straw is part of the OSI QUAD Window & Door System and is used to insulate and seal around windows and door frames. It can also be used for jambs, mud sills, header joints, corner joints, top plate penetrations, electrical and plumbing penetrations and other areas where air infiltration or heat loss may occur. Bonds most building materials including vinyl, aluminum, fiberglass, wood, OSB, PVC, concrete and metal.

LIMITATIONS

- OSI Quad Foam Gun or Straw is not a fire stopping material and SHOULD NOT be used in areas that require fireproof or fire stopping materials.
- Urethane foams are adversely affected by sunlight (UV light). Exposed foam must be coated with a protective covering or coating.
- Do not store product on its side
- Does not bond to polyethylene, polytetrafluoroethylene (PTFE)/Teflon® or siliconized surfaces
- For cold weather applications, product should be stored above 41°F (5° C) at least 12 hours before application

COVERAGE

Total Yield per 16 oz. (453g) can <ul style="list-style-type: none"> ▪ Gun: Maximum of 25L ▪ Straw: Maximum of 19L 	Total Yield for a ½" x ½" joint <ul style="list-style-type: none"> ▪ Gun: 508 feet (154 meters) ▪ Straw: 386 feet (117 meters)
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TECHNICAL DATA

Typical Uncured Physical Properties:

Color:	Tan	% Solids	70 % by weigh
Appearance:	Minimal expansion foam	Odor:	Ether like
Base:	Single component polyurethane	Flashpoint:	-155.2°F (-104°C)
Specific Gravity:	1.107	VOC Content:	16 % by weight CARB 177 g/l SCAQMD
Shelf Life:	Gun: 18 months from date of manufacture (unopened) Straw: 15 months from date of manufacture (unopened)		
Best Buy Date	DD/MM/YYYY (bottom of cannister)		
Explanation:	DD/MM/YY (on box) DD= Day of manufacture MM= Month of manufacture YYYY or YY= Year of manufacture		
Example:	28/10/2018 or 28/10/18 = October 28, 2018		

Typical Application Properties:

Application Temperature:	Product should be stored between 41°F (5°C) and 77°F (25°C) at least 12 hours before application. For best results, store at room temperature. During application, working environment and substrates should be between 14°F (-10°C) and 86°F (30°C).		
Tack-free Time:	Approx. 8 to 10 minutes* At 73°F and 70% relative humidity		
Cure Time:	Approx. 24 hours*	*Cure time is dependent on temperature, humidity and depth of sealant applied	
Cut Time	Gun: Approx. 25-35 minutes*		
	Straw: Approx. 70 minutes*		

Typical Cured Performance Properties:

Color:	Tan	Service Temperature:	-40°F (-40°C) to 194°F (90°C)
Surface Burning Characteristics	Flame Spread: 10 Smoke Development: 25		ASTM E84
Pressure Test for Polyurethane Foam	Pressure Build-Up: Gun: 0.2471 Straw: 0.6236		AAMA 812
Specifications:	<ul style="list-style-type: none"> ▪ GreenGuard Certified for Children and Schools ▪ Tested in accordance with AAMA 504 Voluntary Laboratory ▪ Test Method to quantify Fenestration Installation Procedures ▪ **Conforms to ASTM E2112 Standard Practice for Installation of Exterior Windows, Doors, and Skylights, Annex A1, Type A – Low Pressure Foam Sealant 		

**The OSI QUAD Window & Door System uses similar practices and principle as ASTM E2112 Standard Practice for Installation of Exterior Windows, Doors and Skylights. ASTM E2112 is intended to provide technical guidance to organizations that are developing training programs for installers of fenestration units. The majority of fenestration units and materials used to install them are certified as meeting specified performance characteristics. The OSI QUAD Window & Door System products have been tested in accordance with the relevant specifications required for performance under both ASTM and AAMA guidelines. The specifications for each product are listed on each component individual technical data sheet.

DIRECTIONS

Tools Typically Required: Utility Painter's tape for protecting surfaces and utility knife. For gun application: OSI Foam Gun (IDH #1413066) and OSI Foam Clean (IDH # 1427512).

Safety Precautions: n Always wear eye protection, gloves and proper work clothes when using OSI QUAD Foam Gun or Straw. Wash hands after use. Cured foam is difficult to remove from skin, clothing and other substrates. It may discolor skin.

Preparation: Read all operating instructions packaged with the dispensing unit before using. All surfaces must be free of dust, dirt, oil and other foreign materials. Cover surfaces not intended to be foamed as cured foam is difficult to remove. The temperature of the product should be kept between 41°F (5°C) and 77°F (25°C). For best results, store can at room temperature for at least 12 hours before application (see storage below). Under these conditions, the product can be applied when the surfaces and working area are between 14°F and 86°F (-10°C to 30°C).



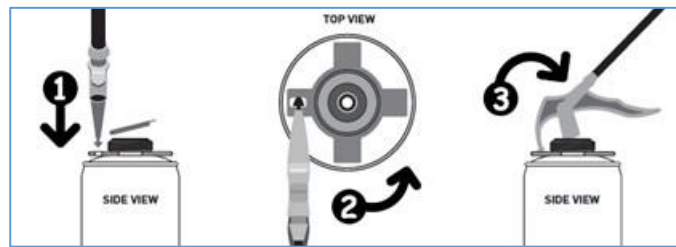
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DIRECTIONS

Gun Application: Screw applicator onto coupling unit until it will go no further. Do not over tighten. Shake can well before use (minimum of 15 times). Adjust bead size with the gun regulator screw. When working with the gun, always keep the can upside down. Using the OSI Foam Gun, perimeter seal around window, doors and rough openings. Fill the gap to approximately 30%. Repeat shaking regularly during application. Foam is tack-free in 8 - 10 minutes* and fully cured in approximately 24 hour*. If necessary, any excess cured foam can be trimmed with a sharp knife or sanded, usually after approximately 1 hour*. Cured foam exposed to prolonged sunlight must be covered with exterior grade paint, stain or sealant.

Straw Application: Shake can vigorously before use (15-20 times). Remove cap covering the valve. Connect the straw to the can by inserting the tab end into the hole in the can's threaded adapter and turn 90°. Slowly but firmly push the trigger into the can's valve. A slight click indicates a proper connection. CAUTION: Pushing too hard to connect may cause foam to dispense. With the valve end of the can down, squeeze trigger to dispense foam. Adjust bead size by applying pressure to the trigger. Seal perimeter around window or door rough openings. Fill the gap to approximately 30%. If there are pauses longer than 5 minutes during working, the nozzle and valve should be cleaned using acetone or a foam cleaner to avoid foam hardening in the straw. Foam is tack-free in 8 - 10 minutes* and fully cured in approximately 24 hour*. If necessary, any excess cured foam can be trimmed with a sharp knife or sanded, usually after approximately 1 hour*. Cured foam exposed to prolonged sunlight must be covered with exterior grade paint, stain or sealant. Straw can be clicked onto the OSI Foam Clean or cleaned by soaking in a shallow pan of acetone.



Notes:

- Insufficient air, humidity and/or substrate moisture during application may cause delayed curing or improper cell formation of the foam material. Lightly spraying the cavities with a water atomizer in dry or low humidity climates will allow the foam to cure and develop proper cell structure.
- If possible, avoid direct sunshine to the joint during application. Direct sunshine and high temperatures may cause the foam to sag and flow out of the joint during application and before curing. Cooling the can down prior to application may help to prevent this issue.

Clean-up: Clean tools and uncured product residue immediately with OSI Foam Clean. Cured foam is not affected by solvents and is extremely difficult to remove. When using gun, it is not recommended to remove the can before it is totally empty.

STORAGE & DISPOSAL

Product must be stored vertically, not horizontally on its side. Note: When storing foam dispensing applicators with foam cans attached, be sure to store the tool with the can valve pointing downwards. Storing the can upright may cause propellant to leak and the foam applicator to become inoperative.

Store in a cool, dry place. For maximum performance and shelf life, store between 41°F (5°C) and 77°F (25°C). The product can be stored for a maximum of 1 week at -4°F (-20°C). Do not store below -4°F (-20°C), below this temperature product valve may spontaneously open resulting in leakage.

Containers are under pressure. Do not expose to open flame or temperatures above 120°F (49°C). Do not store under direct sunlight. Excessive heat can cause bursting and premature aging of components resulting in shorter shelf life. When containers are empty, vent off any excess pressure. DO NOT discard empty can in garbage compactor. DO NOT incinerate. DO NOT puncture, cut or weld container.

If the container is free of propellant, this product is not regulated as hazardous waste per 40 CFR 261.20-24

For disposal of unused product please see information below:

Recommended method of disposal for unused product: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.



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LABEL PRECAUTIONS

DANGER! EXTREMELY FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. VAPOR AND SPRAY MIST HARMFUL, OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. CONTENTS UNDER PRESSURE.

DANGER! Contains modified polymeric MDI, diphenylmethandiisocyanate, Tris(2-chloroisopropyl) phosphate, dimethylether and hydrocarbon propellant mixture. **EXTREMELY FLAMMABLE.** Do not use near sparks, heat or open flame. Vapors will accumulate readily and may ignite explosively. Ventilate area during use and until all vapors are gone. **DO NOT SMOKE.** Extinguish all ignition sources. If burned, dried foam may release hazardous decomposition products. Dried foam may be combustible if exposed to flame or temperatures above 240°F. **CONTENTS UNDER PRESSURE.** Avoid prolonged exposure to sunlight or heat from radiators, stoves, hot water and other heat sources that may cause bursting. Do not puncture, incinerate, burn or store above 120°F. Do not discard empty can in garbage compactor. **VAPOR AND SPRAY MIST HARMFUL.** Gives off harmful vapor of solvents and isocyanates. Do not use if you have chronic lung or breathing problems, or if you have ever had a reaction to isocyanates. Use only with adequate ventilation. Use appropriate respiratory protection when potential to exceed exposure limits exists. If symptoms develop or persist call a doctor or obtain emergency medical treatment; have this label with you. **EYE AND SKIN IRRITANT.** Avoid contact with eyes and skin. Prolonged or repeated skin contact may lead to sensitization and dermatitis. Wash hands after using. Do not swallow. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

FIRST AID: For eye contact, flush with water for 15 minutes. Call a physician if irritation develops and persists. For skin contact, wipe off excess uncured foam with clean rag or paper towel immediately. Get medical attention if irritation develops and persists. If affected by inhalation, remove to fresh air and contact a physician. If swallowed, do not induce vomiting. Call a physician or Poison Control Center immediately. For professional use only. **KEEP OUT OF REACH OF CHILDREN.**

 **WARNING: Cancer and 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.

LIMITED WARRANTY

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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 every day 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.

For Technical Assistance call: 1-800-624-7767 – Mon-Fri - 9:00a – 4:00p ET
www.ositough.com



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