



# TECHNICAL DATA SHEET

Revision: Feb 27, 2020  
Supersedes: May 9, 2016  
Ref. #: 232594

## WINDOW & DOOR INSTALLATION FOAM

# QUAD<sup>®</sup> FOAM

LOW EXPANSION  
WON'T BOW WINDOWS

## DESCRIPTION

OSI QUAD Foam Window & Door Installation Foam is a single component, minimal expansion and low-pressure polyurethane foam packaged in a pressurized metal container. It is specifically designed for use with the OSI QUAD Window & Door System. It is dispensed in bead form for sealing gaps and cracks, holes and voids around windows and doors, in most types of construction projects. The product 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. OSI QUAD Foam will not warp or deform windows and doors. OSI QUAD Foam 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
1866185	21.1 fl. oz. (598g)	Tan

## FEATURES & BENEFITS

- Low Foam Pressure/Low Expansion – will not warp or deform windows and doors
- 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

## RECOMMENDED FOR

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 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

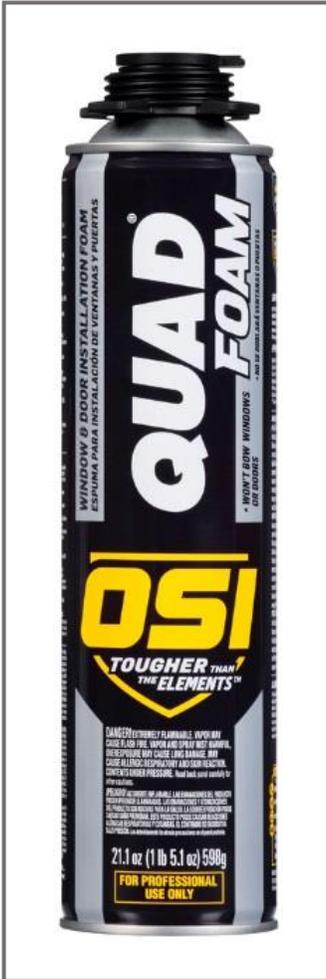
### Total Yield per 21 oz. (598g) can

- Gun: Maximum of 29L

### Total Yield for a 1/2" x 1/2" joint

- Gun: 611 ft (186 m)

**NOTE:** Yields shown are based on theoretical calculations, for comparison purposes, and will vary depending on ambient conditions and particular application.





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## TECHNICAL DATA

### Typical Uncured Physical Properties:

<b>Color:</b>	Tan	<b>% Solids</b>	70 % by weigh
<b>Appearance:</b>	Minimal expansion foam	<b>Odor:</b>	Ether like
<b>Base:</b>	Single component polyurethane	<b>Flashpoint:</b>	-155.2°F (-104°C)
<b>Specific Gravity:</b>	1.107		
<b>Shelf Life:</b>	18 months from date of manufacture (unopened)	<b>VOC Content:</b>	16 % by weight      CARB 177 g/l                      SCAQMD
<b>Best Buy Date</b>	<b>DD/MM/YYYY (bottom of cannister)</b>		
<b>Explanation:</b>	<b>DD/MM/YY (on box)</b>		
	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:

<b>Application Temperature:</b>	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).		
<b>Tack-free Time:</b>	Approx. 8 to 10 minutes*      At 73°F and 70% relative humidity		
<b>Cut Time</b>	Gun:      Approx. 25-35 minutes*		
<b>Cure Time:</b>	Approx. 24 hours*                      *Cure time is dependent on temperature, humidity and depth of sealant applied		

### Typical Cured Performance Properties:

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

\*\*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.

**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.

## 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](http://www.P65Warnings.ca.gov).**

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



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## LIMITED WARRANTY

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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](http://www.ositough.com)



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