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APRIL 2024 (Supersedes July 2020)

# POLY-JET<sub>®</sub> LOX

## One-Component, Polysulfide, Gun-Grade, Low Modulus Joint Sealant

#### DESCRIPTION

POLY-JET LOX is a single-component, polysulfide, gungrade, low modulus joint sealant. It cures on exposure to moisture to form an effective joint sealant. POLY-JET LOX is formulated to bond to damp or dry Portland cement concrete joints and cracks.

#### **USES**

POLY-JET LOX is specifically formulated to meet the requirements of the liquid oxygen test of the U.S. Air Force and is recommended for use in areas that are exposed to liquid oxygen.

POLY-JET LOX is <u>not</u> compatible with asphalt and <u>cannot</u> be used in asphaltic concrete pavement or with asphalt-impregnated expansion joint fillers.

With its non-sag consistency, POLY-JET LOX can be used on vertical and overhead installations as is, or it can also be used horizontally if tooled immediately after installation. Primer is not required when POLY-JET LOX is applied in concrete joints.

### **PACKAGING**

11 Oz. (325.3 mL) Cartridges (12/Carton) 5 Gallon (18.9 L) Pails

### **COVERAGE**

The chart below shows the approximate number of lineal feet that can be sealed with an 11 oz. (325.3 mL) cartridge  $[1/2" \times 1/2" (12.7 \times 12.7 \text{ mm}) \text{ joint size} = 84 \text{ lineal ft./gal.} (6.8 \text{ lineal m/L})].$ 

	WIDTH OF JOINT				
DEPTH OF JOINT	1/4" (6.4 mm)	1/2" (12.7 mm)	5/8" (15.9 mm)	3/4" (19.1 mm)	<b>1"</b> (25.4 mm)
1/4"	30	20	12	(10.111111)	(23.4 11111)
(6.4 mm)	(9.1)	(6.1)	(3.7)		
3/8"		13	8	6	
(9.5 mm)		(4)	(2.4)	(1.8)	
1/2"		7	5	4	3
(12.7 mm)		(2.1)	(1.5)	(1.2)	(0.9)

## SHELF LIFE

When stored indoors in original, unopened containers at temperatures between 40° - 90° F (4° - 32° C), optimum performance and best use is obtained within six months of date of manufacture.

## SPECIFICATIONS/STANDARDS

- TT-S-230, Type II, Non-Sag
- CRD-C-506, Type II, Class B
- ASTM C920, Type S, Grade NS, Class 25, Use NT, O

## **TECHNICAL DATA**

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	TEST METHOD	TYPICAL VALUES			
Sealant Consistency:	ASTM C639	Non-Sag			
Viscosity, cps	ASTM D2393	1,000,000 -			
@ 77° F (25° C)	ASTIVI D2393	1,300,000			
Tack-Free Time:	ASTM C679	12 hours			
Specific Gravity:	ASTM D1475	1.5 – 1.56			
Durometer Shore A*:	ASTM D2240	40 ± 5			
Resiliency % **:	ASTM D3583	80 min.			
Modulus @ 150%, psi Die C*:	ASTM D412	100 max.			
Elongation %, Die C*	ASTM D412	200 min.			
Bond to Concrete					
@ -20° F 50%					
extension:					
(1/2" x 1/2" x 2"	ASTM D3583				
specimen)*	ASTM D3583	Pass 3 Cycles			
Non-immersed	ASTM D3583	Pass 3 Cycles			
Water-immersed	Federal Spec.	Pass 3 Cycles			
Fuel-immersed	SS-S-200E				
Change in weight %**:	ASTM D3583	1.5 max			
Change in volume %**:	Federal Spec. SS-S-200E	2.5 max			
Flame Resistance**:	Federal Spec.	Pass			
2 min. @ 500° F	SS-S-200E				
Tensile Adhesion, %**:					
1/2" x 1/2" x 2"	ASTM D3583	200 min.			
specimen					
Artificial Weathering:					
LOX Impact Test @	NHB 8060.1B	Pass			
Ambient	Test 13	1 400			
Temp. 7.2 foot pounds					
* Sample cured 21 days @ 73+5° F and 50+5% relative humidity					

<sup>\*</sup> Sample cured 21 days @ 73±5° F and 50±5% relative humidity

\*\* W. R. MEADOWS sample preparation

## CONTINUED ON REVERSE SIDE ...

## W. R. MEADOWS, INC.

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#### **APPLICATION**

POLY-JET LOX may be applied by manual or air-operated caulking guns, putty knife, or trowel. POLY-JET LOX adheres well to unprimed concrete; however, REZI-WELD $^{\text{\tiny M}}$  LV from W. R. MEADOWS is recommended for optimum adhesion.

Joint Preparation ... Joints should be clean and free from dirt, oil, grease, wax, loose materials, etc. For joints ½" - 1" (12.7 - 25.4 mm), the sealant depth should be half of the joint width. For joints less than ½" (12.7 mm), sealant depth should be ¼" (6.4 mm). Deep joints should be filled to the proper depth with KOOL-ROD™ or KOOL-ROD SOFT backer rod from W. R. MEADOWS. POLY-JET LOX is not recommended for joints over 1" (25.4 mm) in width because of the longer curing time required. POLY-JET LOX is a non-sag consistency and will require tooling for horizontal applications.

For completely clean installations, apply masking tape 2" (50.8 mm) wide to the surface adjoining the joint before POLY-JET LOX is applied; remove the tape before the sealant starts to set. POLY-JET LOX may be applied to slightly damp surfaces; this precludes the necessity to wait for early morning dew to completely evaporate. Under normal conditions [70° F (21.1° C) and 50% relative humidity), a skin will form on the sealant in approximately 12 hours. To speed the formation of surface skin, the sealant in the joint may be tooled with water, which results in a skin forming in about 30 minutes.

Time required for complete curing of the sealant depends upon the size of the joint, temperature, and humidity. High temperatures and high humidity promote rapid curing. Conversely, at low temperatures and low humidity, a longer time will be required to develop the optimum qualities of the sealant. In exposed applications with moderate temperature and humidity, a 1/4" (6.4 mm) thickness of sealant on a non-porous material will cure full-depth within two weeks. If the sealant is applied where moisture may penetrate from two or more directions, curing will proceed more rapidly.

#### **PRECAUTIONS**

The odor emitted by POLY-JET LOX may be objectionable during the installation and curing phases of construction. Adequate ventilation of the work area may be required. POLY-JET LOX is a moisture-curing material. All surfaces to be sealed must be completely clean and free of any contamination, such as curing or waterproofing compounds, laitance, etc. POLY-JET LOX adheres tenaciously without use of a primer to concrete. POLY-JET LOX is not compatible with bituminous materials.

For most current data sheet, sustainability information, and SDS, visit www.wrmeadows.com.



## LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

#### **Disclaimer**

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control

over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.

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