



TECHNICAL DATA SHEET



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DESCRIPTION

Loctite® PL® Polyurethane Roof & Flashing Sealant is a premium quality, commercial grade sealant developed especially for forming permanent, water and weatherproof seals in all exterior gaps and joints. This sealant is elastic and remains flexible to expand and contract with construction material movement to protect and retain the original seal. It provides properties of non-sag, permanent flexibility and corrosion resistance. It exhibits outstanding durability and tear resistance. It usually requires no primer and resists deterioration from weather, stress or movement. It is UV and ozone resistant and does not soften in the sun.

RECOMMENDED FOR:

Seals roof flashing around chimneys and roof edging. Also suitable for shingle tabbing and for covering roofing nails. Bonds asphalt, aluminum, fiberglass, metal, brick, wood, concrete, stucco and many more substrates.

NOT RECOMMENDED FOR:

- Underwater applications or permanent water immersion
- Applications requiring temperature resistance greater than 200°F (93°C)
- Joint depths greater than 1/2" without the use of a backer rod
- Use with fillers impregnated with oil, asphalt, tar or any migratory saturant
- Contact with oil-based caulking compounds, butyl caulking compounds and silicone sealants (uncured and cured)

FEATURES & BENEFITS:

Feature	Benefits
Flexible.....	Use on expansion joints; ± 25% movement
Weatherproof.....	Withstand harsh environments
Does not deteriorate.....	One-time application
Paintable.....	Blends with surroundings
Low-VOC formula.....	Complies to stringent Federal & State Regulatory Requirements

Colour	Item #	Package	Size
Black	1402254	Paper Cartridge	10 fl. oz.
Black	1402253	Paper Cartridge	10 fl. oz.

For a 10 fl. oz. cartridge:

- A 1/4" (6 mm) bead extrudes approximately 30.6 ft (9.35 m).
- A 3/8" (9.5 mm) bead extrudes approximately 13.6 ft. (4.1 m).

COVERAGE

DIRECTIONS

Tools Typically Required:

Utility knife, caulking gun and tool to puncture cartridge seal.

Safety Precautions:

Gloves. Sealant may temporarily stain skin.

Surface Preparation:

Surfaces must be structurally sound, dry, clean, free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing, curing and painting and compound.

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. Concrete must be fully cured.

Wood and painted wood:

Cut back weathered and treated surfaces and dry rot until clean, sound wood is reached. Loctite® PL® Polyurethane Roof & Flashing Sealant will adhere to most new and old dry, oil-free wood. Scrape away paint to bare wood.

Metal:

Scale, rust and coatings must be removed to expose bright metal. Protective coatings should be removed with a solvent as well as any chemical residue or film.

General Preparation:

Use above 40°F (4°C). In cool or cold weather, store container where temperature is about 75°F (25°C) for at least 24 hours before using. Cut nozzle at a 45° angle to desired bead size and puncture inner seal.

Priming:

While Loctite® PL® Polyurethane Roof & Flashing Sealant is generally considered a non-priming sealant, special circumstances or substrates (Copper, galvanized and stainless steel) may require a primer. It is the user's responsibility to check the adhesion of the cured sealant on a test joint before applying to the entire project. Where incidental water immersion may occur, priming is required.

Apply primer full strength with a brush or clean cloth. A light, uniform coating is sufficient for most surfaces. Porous surfaces, may require more primer, but do not over apply. Allow primer to dry prior to sealant application. Depending on temperature and humidity, the primer will be tack free in 15 to 30 minutes and ready for sealant. Priming and sealing must be done on the same working day.

Application:

Apply sealant with a steady pressure, forcing into the joint. Dry tooling is recommended within 5 minutes of extrusion. Do not use soapy water as this may cause the surface to discolor. If tooling with solvent is necessary, use clean mineral spirits. Protect open containers from heat and /or direct sunlight. Do not use in joints deeper than ½" (13 mm) without the use of a backer rod. The depth of the sealant should be half the width of the joint. The maximum depth is ½" (31 mm) and the minimum is ¼" (6 mm). Sealant skins within 24 hours, is functional within 3 days and reaches full cure in about 1 week.

Clean-up:

Clean tools and any uncured sealant residue immediately with mineral spirits. Cured sealant may be carefully cut away with a sharp-edged tool.

STORAGE AND DISPOSAL

NOT DAMAGED BY FREEZING. Store in original, tightly closed container away from heat and direct sunshine. Elevated temperatures will reduce shelf life. In cool or cold weather, store container at room temperature for at least 24 hours before using. Use an approved hazardous waste facility for disposal.

LABEL PRECAUTIONS

WARNING! Combustible liquid and vapor. Contains mineral spirits, calcium oxide, talc, calcium carbonate, toluene diisocyanate. KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. May cause skin, eye and respiratory irritation. May cause dermatitis and allergic responses. Avoid contact with skin, eyes and clothing. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation. Avoid breathing vapor. Use only with adequate ventilation. **KEEP OUT OF REACH OF CHILDREN**

Refer to the Material Safety Data Sheet (MSDS) 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. 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.

TECHNICAL DATA

Typical Uncured Physical Properties		Typical Application Properties	
<u>Color:</u>	Black	<u>Application Temperature:</u>	Apply and cure between 20°F (-6°C) and 120°F (49°C)
<u>Appearance:</u>	Non-slumping paste	<u>Tack-Free Time:</u>	24 hours @ 75°F (24°C) and 50% Relative Humidity (ASTM C 679)
<u>Base:</u>	Polyurethane	<u>Full Cure Time:</u>	7 days @ 75°F (24°C) and 50% Relative Humidity Cure time is dependent upon temperature, humidity, porosity of substrate and joint depth.
<u>Odor:</u>	Mild	<u>Rheology, Vertical Sag:</u>	< 0.25" (24 hours):
<u>Viscosity:</u>	16,000 poise		
<u>Flash Point:</u>	> 200°F (93°C)		
<u>Specific Gravity:</u>	1.21		
<u>Solids Content:</u>	96.82%		
<u>VOC Content:</u>	< 44 g/L (< 4% by weight)		
<u>Shelf Life:</u>	12 months from date of manufacture (unopened)		
<u>Lot Code Explanation:</u>	XX1AUG018		
(Lot code stamped on bottom plunger of cartridge)	XX = Process ID denoting mixers or packaging lines 1 = Sequential number of batches AUG = Month 01 = Day 8 = Year For example: August 1, 2008		

Typical Cured Performance Properties

<u>Colour:</u>	Black
<u>Cured Form:</u>	Non-flammable, rubbery solid
<u>Service Temperature:</u>	-40°F (-40°C) to 180°F (82°C)
<u>Shrinkage:</u>	None
<u>Water Resistance:</u>	Yes
<u>Paintable:</u>	Yes, once fully cured (at least 7 days).
<u>Specifications:</u>	<ul style="list-style-type: none"> ▪ ASTM C 920, Type S, Grade NS, Class 25, Use NT, M and A ▪ Federal Specification TT-S-00230C, Type II, Class A ▪ Meets CAN/CGSB-19.13-M87 ▪ Corps of Engineers CRD-C-541, Type II, Class A ▪ USDA compliant for use in Meat and Poultry areas
<u>Movement Capability:</u> (ASTM C 719)	± 25%
<u>Tensile Strength:</u> (ASTM D 412)	350 ± 50 psi

Tear Strength: 50 ± 10 pli
(ASTM D 1004)

Hardness, Shore A: 27.5 ± 2.5
(ASTM C 661)

Ultimate Elongation at
Break: 800% ± 50%
(ASTM D412)

Adhesion in Peel: 30 ± 5 pli
(Concrete to Aluminum)