



# TECHNICAL DATA SHEET



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## DESCRIPTION

Loctite® PL® Polyurethane Self-Leveling Sealant is a professional grade sealant for concrete. It is a one component, polyurethane, self-leveling sealant for contraction/expansion joints and cracks in concrete floors and decks. It cures in place to form a highly resilient and abrasion resistant seal, which resists deterioration caused by weather, stress, movement, traffic and water. Its abrasion and tear resistance makes it ideally suited for applications exposed to pedestrian and vehicular traffic

## RECOMMENDED FOR:

**REPAIRING:**

- Driveways
- Garage Floors
- Concrete Floors and Decks
- Sidewalks

## NOT RECOMMENDED FOR:

- Vertical surface repair (use on horizontal surfaces only)
- Underwater applications or permanent water immersion
- Use in areas of high chlorine concentration such as around swimming pools
- Applications requiring temperature resistance greater than 180°F (82°C)
- Joint depths greater than 3/8" (9.5 mm) without the use of a backer rod. In joints deeper than 3/8" (9.5 mm) the sealant may bubble if applied too deep or if substrate is not absolutely dry
- Use with fillers impregnated with oil, asphalt, tar or any other migratory saturant
- Contact with oil-based caulking compounds, butyl caulking compounds and silicone sealants (Uncured and cured)
- Exterior applications when rain is expected before sealant reaches initial cure
- Aircraft runway or tarmac use

## FEATURES & BENEFITS:

Feature	Benefits
Self-Leveling formula.....	No tooling required
Low VOC formulation.....	Complies to stringent Federal & State Regulatory requirements
Flexible.....	Use on expansion joints; Withstands joint movement without distortion or failure
Weatherproof.....	Withstands a wide range of weather conditions; Virtually unaffected by extreme temperature changes
Paintable.....	Blends in with surroundings for a professional finish

Color	Item #	Package	Size
Limestone Gray	1402261	Paper Cartridge	10 fl. oz.
Limestone Gray	1402267	Paper Cartridge	10 fl. oz.
Limestone Gray	1402266	Paper Cartridge	28 fl. oz.

## COVERAGE

### For a 10 fl. oz. cartridge:

A ¼" (6 mm) bead extrudes approximately 30.6 ft (935 m).  
A 3/8" (9.5 mm) bead extrudes approximately 13.6 ft. (4.1 m).

### For a 28 fl. oz. cartridge:

A ¼" (6 mm) bead extrudes approximately 85.8 ft (26.1 m).  
A 3/8" (9.5 mm) bead extrudes approximately 38.1 ft (11.6 m).

### Tools Typically Required:

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

### Safety Precautions:

Wear gloves. Sealant may temporarily stain skin.

### Surface Preparation:

Surfaces must be structurally sound, dry and free of all loose aggregate, paint, oil, grease, asphalt, release agents, wax and mastic compounds prior to the application of the sealant.

### Backing Materials:

Maximum recommended joint depth is 3/8" (9.5 mm). Sealants may bubble if applied too deep or if substrate is not absolutely dry. In joints deeper than 3/8" (9.5 mm) use of a backer rod is recommended. For joints subject to puncture (i.e. by either high heels or umbrella points), use of a stiffer or higher density back up material is required. Cork or rigid non-impregnated cane-fiber joint fillers are suitable. Make sure that the backing material is tight to the sides of the joint to prevent loss of sealant through the bottom. Note: Do not use other caulks or sand as a bottom bed in a joint.

### New Concrete:

Remove all loose material, assuring that joining surfaces are clean, dry and structurally sound. Surfaces in contact with form release agents should be cleaned by sandblasting. Fresh concrete must be fully cured. Laitance must be removed by abrading.

### Old Concrete:

For joints previously sealed, remove all joint sealing material by mechanical means. If joint surfaces have absorbed oils, sufficient concrete must be removed to ensure a clean surface.

### 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.

### Application:

Apply sealant with a steady pressure, forcing into the joint. Fill joints from the bottom; avoid bridging of the joint, which may form air bubbles. Sealant will self-level to form a clean joint surface. Protect open containers from heat and /or direct sunlight. Do not use in joints deeper than 3/8" (9.5 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 in a well-ventilated area to the outdoors. 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.

## PRECAUTIONS

**WARNING!** Contains calcium oxide, toluene diisocyanate, silicon dioxide, mineral spirits and talc. Combustible liquid and vapor. 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>	Limestone	<u>Application Temperature:</u>	Apply and cure between 40°F (4°C) and 120°F (49°C)
<u>Appearance:</u>	Thick liquid	<u>Tack-Free Time:</u>	24 hours @ 75°F (24°C) and 50% Relative Humidity (ASTM C 679)
<u>Base:</u>	Polyurethane	<u>Fully Cured:</u>	3 to 7 days @ 75°F (24°C) and 50% Relative Humidity Cure time is dependent upon temperature, humidity, porosity of substrate and depth of joint.
<u>Viscosity:</u>	120,000 cps		
<u>Odor:</u>	Mild		
<u>Flash Point:</u>	> 200°F (93°C)		
<u>Specific Gravity:</u>	0.88		
<u>% Solids Content:</u>	96%		
<u>VOC Content:</u>	43 g/L		
<u>Shelf Life:</u>	12 months from date of manufacture (unopened)		
<u>Lot Code Explanation:</u>	<b>3L0028HP11</b>		
(Lot code stamped on bottom plunger of cartridge)	0 = Last Digit of Year of Manufacture 028 = Day of Manufacture based on 365 days per year  For example: 0028 = January 28, 2010		

**Typical Cured Performance Properties**

<u>Color:</u>	Gray
<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>Movement Capability:</u> (ASTM C 719)	± 25 %
<u>Ultimate Elongation at Break:</u> (ASTM D412)	800% ± 50%
<u>Adhesion in Peel:</u> (ASTM C 794)	30 ± 5 pli
<u>Tensile Strength:</u> (ASTM D 412)	350 ± 50 psi
<u>Tear Strength:</u> (ASTM D 1004)	50 ± 10 pli

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

- Specifications:
- ASTM C 920, Type S, Grade P, Class 25, Use T and M
  - Meets CAN/CGSB-19.13-M87 Classification C-1-40-B-N, No. 81028
  - Federal Specification TT-S-00230C, Type I, Class A
  - Corps of Engineers CRD-C-541, Type I, Class A
  - USDA compliant for use in Meat and Poultry areas.