

# **Technical Data Sheet**

Revision: December 1, 2023 Supersedes: July 12, 2021 Ref. #: 459029

# PL® 500 Landscape Construction Adhesive



LOCTITE® PL® 500 Landscape Construction Adhesive is an exterior, heavy-duty, premium quality adhesive designed to meet many landscaping needs. This product delivers a quick and easy solution for landscaping projects such as securing block walls and capstones, installing concrete paving stones, and for bonding brick, stone, timbers, concrete, and wood. PL 500 Landscape Construction Adhesive may be used under a variety of moisture and temperature conditions ranging from sub-freezing to elevated temperatures.

#### Available as:

Item #	Package	Size
1683231	Plastic cartridge	10 fl. oz. (295 ml)
1602122	Paper cartridge	28 fl. oz. (828 ml)

#### **FEATURES & BENEFITS**

- · Water and weather resistant
- Easy to gun in cold weather
- Provides a durable bond to multiple surfaces
- Easy solution for bonding the final course of cap stones or installing cement paving stones to a solid surface
- Will bridge minor gaps when bonding irregular surfaces
- Bonds to wet and dry surfaces

## **RECCOMENDED FOR**

Bonds to most common landscaping materials such as brick, stone, timbers, slate, concrete, and wood.

# **LIMITATIONS**

- Pressure treated lumber must be well seasoned for at least 6 months of weather exposure
- Applications over hygroscopic salt-treated wood, such as zinc chloride treatments are not recommended. These substances attract, absorb, and retain moisture.
- Water submersion applications or constantly damp environments. Wet surface application is possible if surfaces have the possibility to dry.
- · Not recommended for use with some plastics, such as composite decking materials
- Areas of high heat, such as fireplace openings or fire pit construction
- Will not bond to limestone or sandstone
- Landscape step/stair construction not recommended, for safety reasons
- Recommended for exterior use only

# **COVERAGE**

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

• A 1/4" (6 mm) diameter bead extrudes approximately 30.6 ft (9.3 m) • A 3/8" (9.5 mm) diameter bead extrudes approximately 13.6 ft. (4.1 m)

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

- A 1/4" (6 mm) diameter bead extrudes approximately 86 ft (26 m)
- A 3/8" (9.5 mm) diameter bead extrudes approximately 38 ft (12 m)





# **Technical Data Sheet**

Revision: December 1, 2023 Supersedes: July 12, 2021 Ref. #: 459029

# TECHNICAL DATA

Typical Uncured Physical Properties		Typical Application Properties		
Color:	Light tan		Application Temperature:	Apply and cure between 0°F (-18°C) and
Appearance:	Thixotropic liquid			below 100°F (38°C)
Base:	Synthetic rubber and resins (Formaldehyde / Asbestos free) 210,000 cps		Odor:	Acetone
Viscosity:			Open Time:	15 minutes*
Flash Point:	1.4°F (-17°C)		Repositioning Time:	30 minutes*
Specific Gravity:	1.44		Clamping Time:	24 hours
VOC Content:	0.25% by weight	CARB	Cure Time:	2 to 7 days* at 78°F (25°C) and 50% RH
	7.5 g/l	SCAQMD rule 1168	Clean up:	Clean up uncured adhesive residue with acetone or mineral spirits. Scrape away cured adhesive using a sharp-edged tool.
Shelf Life:	From date of manufacture (unopened): 18 months			ar of manufacture ure based on 365 days in a year ay of 2018 = March 1, 2018

<sup>\*</sup>Time is dependent upon temperature, humidity, porosity of substrate, and amount of adhesive used

Typical Cured Performance Properties						
Color: Cured form:	Light tan Non-flammable, hard solid	Service Temperature: Water Resistance:	-20°F (-29°C) to 150°F (66°C) Yes			
Curea form.	Non-naminable, nard solid	<u>water resistance.</u>	163			

Compression Shear Strength:

Douglas Fir to Douglas Fir: 283 psi

# **DIRECTIONS**

#### **Tools Typically Required:**

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

#### **Safety Precautions:**

Wear gloves to avoid skin contact and wash hands after use.

## Preparation:

The temperature of the adhesive, bonding surfaces, and the working area must be between  $0^{\circ}F$  (- $18^{\circ}C$ ) and  $100^{\circ}F$  (38°C). For smooth, fast, easy application during cold weather, store adhesive at room temperature ( $70^{\circ} \pm 5^{\circ}F$ ) 24 hours prior to use. Ensure surfaces to be bonded are clean, structurally sound, and free of standing water, dust, grease, oil, and/or other contaminants. Pre-fit all materials prior to applying product. Cut off tip of cartridge at 45° angle to desired bead size. For exterior applications the recommended bead size is 3/8" (9.5 mm). Puncture seal inside of nozzle.

#### **General Application Guidelines:**

Apply a continuous zigzag bead to one of the surfaces to be bonded. Apply the adhesive at a rate so materials can be positioned and fastened within 15 minutes. All projects may require support until adhesive has cured. It is recommended that all foot traffic stay off paver stones or retaining caps for at least 24 to 48 hours after installation, and heavy traffic for approximately 4 to 5 days.

## For Landscape Blocks:

When installing the cap onto the final course of landscape blocks, apply approximately 2" in from the front and 2" in from the back of the cap to be installed.

#### For Concrete Paving Stones:

Apply an "S" shaped bead to the back of the stone to be installed. If using old concrete, clean with a 20% muriatic acid solution, then rinse with clean water and allow to dry prior to applying adhesive.

#### Clean-up:

Clean tools and uncured adhesive residue immediately with acetone or mineral spirits in a well-ventilated area to the outdoors. Follow solvent manufacturer's precautions for using solvents. Cured adhesive may be carefully cut away with a sharp-edged tool. Note this may result in damage to surfaces.



# **Technical Data Sheet**

Revision: December 1, 2023 Supersedes: July 12, 2021 Ref. #: 459029

# **STORAGE & DISPOSAL**

Not damaged by freezing. For best results, store at 70 ± 5°F in a cool, dry place. Store away from heat, flame, and sparks. Take unwanted product to an approved household hazardous waste transfer facility. Hardened material may be disposed of with trash.

# **LABEL PRECAUTIONS**

DANGER! Extremely Flammable. VAPORS MAY CAUSE FLASH FIRE. HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE EYE, SKIN, AND RESPIRATORY IRRITATION.

DANGER! Contains acetone, methyl acetate, and crystalline silica. Vapors may ignite explosively. Do not use or store near heat, sparks, or open flame. Do not smoke when using this product. Extinguish all flames and pilot lights and turn off all sources of ignition, including stoves, heaters, and electric motors during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation. Use in a well-ventilated area. Avoid breathing vapors. Avoid contact with eyes and skin. Prolonged or repeated exposure may affect the nervous system causing dizziness, headache, or nausea. If you experience eye watering, headache, or dizziness, leave the area to obtain fresh air. Do not take internally.

FIRST AID: If swallowed do not induce vomiting, call a physician or Poison Control center immediately. For eye contact flush with water for 15 minutes, call a physician. For skin contact, wash thoroughly with soap and water. If overcome by vapors, get fresh air. KEEP OUT OF THE REACH OF CHILDREN.

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage, or may cause cardiac arrhythmia. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.



WARNING: Reproductive Harm – <u>www.P65Warnings.ca.gov</u>

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**

This product is warranted by Henkel Corporation to be free from defects in materials when used as directed. Henkel's sole obligation shall be, at its option, to replace or refund the purchase price of product proven to be defective. Henkel makes no other warranty - express or implied - including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE and will not be liable for consequential or incidental damages. This Limited Warranty gives you specific legal rights, which vary from state to state. For warranty assistance, contact Henkel at 1.800.624.7767 M-F 9:00 am to 4:00 pm ET.



# Trusted Performance. Proven Results.

For over 50 years, LOCTITE Brand adhesives and sealants have taken on the toughest jobs. Used in race cars, airplanes, and even in the space-shuttle, LOCTITE provides solutions for the most demanding industrial, professional and consumer applications. LOCTITE gives you the specialization, power, and performance to not only get your job done, but to get it done right.

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



LOCTITE Brand is part of the Henkel family of brands. Founded in 1876, Henkel is a global leader in the consumer and industrial businesses. Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care (Consumer Brands) and Adhesive Technologies.

Henkel Corporation - Professional & Consumer Adhesives Headquarters - Rocky Hill, CT 06067 www.henkel-northamerica.com