

TECHNICAL DATA SHEET



PL® 510 Wood Construction Adhesive

Description: Loctite® PL® 510 Wood construction adhesive is a premium quality adhesive specifically formulated for bonding all types of wood for interior or exterior construction projects. The formulation is low in odor and cleans up easily with water.

Available As:

Item #	Size	Package
1538750	10 fl oz (295 ml)	Paper Cartridge

Features & Benefits:

- Certified on Wet, Frozen and Treated Lumber
- Will Bridge Minor Gaps
- Low Odor, Easy Clean-Up
- Low VOC Content

Recommended For:

Loctite PL 505 adheres to wet, frozen and treated lumber, plywood, OSB, particleboard, paneling, molding & trim, polystyrene panels and drywall.

For Best Results:

Not recommended for the following applications:

- Underwater applications or permanent water immersion
- Exterior applications where rain or freezing is expected within 24 hours
- · Use on mirrors and metals that will corrode
- Bonding two non-porous surfaces
- Polyethylene, polypropylene, nylon or Teflon®/ polytetrafluoroethylene (PTFE)
- Cement Board (Durock®)
- Composite decking

Coverage:

For a 10 fl. oz. (295 ml) cartridge:

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



TECHNICAL DATA SHEET

Typical L	Incured
Physical	Properties:

Color:	Tan	
Appearance:	Thick paste	
Base:	Co-polymer latex	
Odor:	Mild acrylic odor	
Specific Gravity:	1.224	
Solids Content:	Approximately 70% by weight	
pH:	7.2 – 7.8	
VOC Content:	0.1% by weight	CARB
	47 g/l	SCAQMD rule 1168
Shelf Life:	18 months from date of manufacture (unopened)	
Lot Code Explanation:	YYDDD	
Printed on bottom of plunger	YY= Last two digits of year of manufacture DDD= Day of manufacture based on 365 days in a year	
	Example: 14061 = 61st day of 2014 = March 2, 2014	

Typical Application Properties:

Application Temperature:	Apply and cure between 40°F (4°C) and 100°F (38°C)
Open Time:	10 minutes*	At 70°F and 50% relative humidity
Repositioning Time:	15 minutes*	At 70°F and 50% relative humidity
Cure Time:	48 hours*	At 70°F and 50% relative humidity
	*Time is dependent on temperature, humidity, porosity of substrate and amount of adhesive applied	

Typical Cured Performance Properties:

Color:	Tan
Cured Form:	Non-flammable solid
Service Temperature:	10°F (-12°C) to 160°F (71°C)
Water Resistant:	Yes. Do not use outdoors if rain is expected within 24 hours.
Shear Strength:	ASTM D3498
Dry Lumber: Wet Lumber: Frozen Lumber: Gap Filling:	407 ± 50 psi (2.81 ± 0.34N/mm²) 380 ± 22 psi (2.62 ± 015 N/mm²) 403 ± 46 psi (2.78 ± 0.32 N/mm²) 402 ± 21 psi (2.77 ± 0.14 N/mm²)
Specifications:	 Meets and exceeds APA AFG-01 Meets ASTM D 3498 Conforms to performance requirements of HUD-FHA Application per UMB 60a

Directions:

Tools Typically Required:

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

Safety Precautions:

Wear gloves.

Preparation:

The temperature of the adhesive, the surfaces and the working area must be above 40°F (4°C) and below 100°F (38°C). For best performance, apply adhesive at 70°F (21°C). Ensure surfaces to be bonded are clean, dry, structurally sound and free of dust, grease, oil, snow, ice, standing water or other contaminants. To increase adhesion, sand glossy surfaces to a dull finish.

Application:

General Construction Use:

Pre-fit all materials prior to applying product. Cut off tip of cartridge at a 45° angle to desired bead size. Puncture inside seal of cartridge. Using a caulking gun, apply adhesive to one of the surfaces to be bonded. Press materials firmly together.



TECHNICAL DATA SHEET

Repositioning time is approximately 10 minutes. If work is delayed, remove excess adhesive and reapply.

Paneling Instructions:

Cut and pre-fit panels. Apply ¼" bead near the panel edges and every 6" in-field. Press panel firmly into place. Panels must be installed within 10 minutes of adhesive application. Apply firm pressure across the entire panel surface to ensure good contact with the adhesive. Fasten or brace the panel until the adhesive is dry (minimum of 24 hours). The cure time will vary depending on the temperature, airflow and porosity of the material being bonded.

Clean-up:

Clean tools and uncured adhesive residue immediately with warm water and soap. Cured adhesive may be carefully cut away with a sharp-edged tool.

Storage & Disposal:

DAMAGED BY FREEZING. Store in a cool, dry location at room temperature. Take unwanted product to an approved household hazardous waste transfer facility. Hardened material may be disposed of with trash.

Label Precautions:

CAUTION! Contains ethylene glycol and crystalline silica. May cause skin, eye and respiratory irritation. Avoid contact with eyes and skin. Use with adequate ventilation. Do not swallow. **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.**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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. 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.



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