



TECHNICAL DATA SHEET



Henkel Corporation
Professional and Consumer Adhesives
Avon, OH 44011
Phone 1-800-624-7767
Fax (440) 937-7067
www.henkel.com www.stickwithpl.com



DESCRIPTION:

PL® Marble and Granite is a premium quality adhesive formulated specifically for bonding marble, granite and a wide variety of other building materials. Its innovative formulation can be used in high moisture areas and will not bleed through or stain marble and granite. PL® Marble and Granite adhesive's low VOC formulation is environmentally friendly and meets stringent State and Federal Regulatory requirements.

RECOMMENDED FOR:

Bonds Marble and Granite to:

- Stone
- Wood
- Foam
- Masonry
- Metal
- Plywood and treated plywood
- Concrete
- OSB
- Brick
- Drywall

NOT RECOMMENDED FOR:

- Plastic Tub Surrounds
- Continuous water immersion
- Polystyrene, polyethylene or polypropylene
- Certain materials such as rubbers and plastics may have bonding difficulties. Test before use.

FEATURES & BENEFITS:

Feature	Benefits
Designed for bonding marble & granite.....	Will not stain or bleed through
Waterproof.....	Great for interior and exterior applications
Low odor.....	No strong solvent odor
Strong and versatile.....	Permanently bonds together almost any substrate
High strength.....	Stronger than many substrates it joins together; Up to 3 times the strength of conventional adhesives
Broad service temperature range.....	Suitable for use in hot and cold environments
Low VOC Content.....	Meets stringent State & Federal requirements; Environmentally friendly

Item #	Package	Size
1070546	Paper Cartridge	10.2 Fl. oz. (301 mL)

COVERAGE

A 10.2 Fl. oz. (301 mL) cartridge will extrude approximately 31.2 ft. (9.5 m) of a ¼" (6 mm) bead.

DIRECTIONS

Tools Typically Required:

Utility knife, caulking gun, tool to puncture cartridge seal, plant mister bottle containing water.

Safety Precautions:

Wear gloves. Cured adhesive on bare skin will not come off immediately with washing and will cause skin to darken. Cured adhesive and discoloration will come off in about 3 days.

Preparation:

Use above 41°F (5°C). Surfaces must be clean, dry and free of frost, grease, dust and other contaminants. Pre-fit all materials and protect finished surfaces. Cut nozzle at a 45° angle to desired bead size and puncture inner seal. Be careful not to allow PL® Marble & Granite to cure on a finished surface.

Application:

Apply adhesive to one of the surfaces to be bonded. Press surfaces firmly together. Materials may be repositioned within 45 minutes after applying the adhesive. If bonding two non-porous surfaces (such as foam, metal and fiberglass), add water in the form of a very light or atomized spray from a plant mister bottle to the extruded adhesive. The repositioning time will then be reduced to less than 30 minutes. Use mechanical support for 24 hours while the adhesive cures.

Clean-up:

Clean tools and uncured adhesive residue immediately with mineral spirits. Remove cured adhesive by carefully scraping with a sharp-edged tool.

STORAGE AND DISPOSAL

Not damaged by freezing. After completion of work, seal cartridge nozzle tightly with aluminum foil. Wrap the foil tightly around the nozzle and seal it with tape. Applying petroleum jelly around the opening before sealing with aluminum foil can create a more airtight seal. Product cures with exposure to moisture. Use an approved hazardous waste facility for disposal.

LABEL PRECAUTIONS

WARNING! Contains hydrotreated light petroleum distillate, Methylene bisphenyl diisocyanate, talc, silicon dioxide. May cause eye irritation. May cause dermatitis and allergic responses. Repeated or prolonged contact with skin may cause sensitization. Avoid contact with skin, eyes and clothing. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. Avoid breathing of vapors. Open all doors and windows to ensure fresh air entry during application and until all odors are gone. Ingestion may cause irritation. **KEEP OUT OF REACH OF CHILDREN.**

FIRST AID: In case of skin contact, wash off quickly with plenty of water, then soap and water. If in eyes, flush thoroughly with plenty of water for 15 minutes, seek medical attention. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, seek immediate medical attention.

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>	Tan	<u>Application Temperature:</u>	Apply above 40°F (4°C)
<u>Appearance:</u>	Thick paste	<u>Open Time:</u>	30 minutes
<u>Base:</u>	Polyurethane	<u>Dry Time:</u>	24 to 48 hours @ 25°C (78°F) and 50% RH Cure time is dependent upon temperature, humidity and amount of adhesive used.
<u>Viscosity:</u>	550,000 cps @ 5 rpm @ 75°F (24°C)	<u>Odor:</u>	Minimal
<u>Flash Point:</u>	250°F (121°C)	<u>Clamping Time:</u>	24 hours
<u>Specific Gravity:</u>	1.26	<u>Clean Up:</u>	Clean up uncured adhesive residue with mineral spirits. Scrape away cured adhesive using sharp-edged tool.
<u>Weight:</u>	10.8 lbs/gal	<u>Shrinkage:</u>	None, it expands.
<u>% Solids:</u>	90%		
<u>VOC Content:</u>	45 g/L (4% by weight)		
<u>Shelf Life:</u>	12 months from date of manufacture (unopened)		
<u>Lot Code Explanation:</u>	XX1 AUG 01 8		
(Lot code is 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>Color:</u>	Tan	<u>Water Resistance:</u>	Yes
<u>Cured form:</u>	Non-flammable, rubbery solid	<u>Specifications:</u>	<ul style="list-style-type: none"> ▪ American Plywood Association AFG-01 ▪ ASTM D 3498 ▪ ASTM C 557 ▪ FHA Bulletin UM-60
<u>Service Temperature:</u>		<u>Bond Strength:</u>	
Long Term:	0°F (-18°C) to 160°F (71°C)	(At full cure)	
Short Term:	0°F (-18°C) to 250°F (121°C)	Marble to Marble:	500 psi
		Granite to Granite:	> 500 psi (Resulted in substrate failure) Note that bond strength data will vary, as there are many variations in different types of stones.