



POLYURETHANE 525 Primer

PRODUCT DESCRIPTION AND USE

Polyurethane 525 Primer is a water-based two component polyurethane formulated for use when a rapid curing, high adhesive primer over concrete is required. The material is fortified with a UV absorber package and is suitable for both interior and exterior use. It gives epoxy-like adhesion to both dry and damp concrete and dries for recoating in 15-60 minutes depending upon temperature, humidity and air movement. Polyurethane 525 Primer is low odor and VOC compliant.

Polyurethane 525 Primer was initially developed for use under water-based acrylic stains to improve adhesion to marginally prepared concrete. It leaves the host surface with a natural, non-darkened appearance which makes it ideal in clear driveway sealer systems and over acid stains where softer, more muted looks are desired. Polyurethane 525 Primer is also used over water-based and acetone based dyes.

Chemical Composition

Hydroxyl-functional polyol crosslinked with aliphatic polyisocyanate.

Colors

Clear base material may be tinted with Color Fuse pigment dispersions.

Limitations

- Concrete must be clean and have a minimum profile of CSP2 (similar to 100 grit sandpaper).
- Keep application rate above 200 sq. ft. per gallon. Do not allow to puddle.

TECHNICAL DATA

Physical Properties

Mixing Ratio, by Volume	8-1
Solids Content, by Weight	38%
VOC, grams/liter	82
Adhesion to damp or dry concrete (ASTM D-4541)	400 psi, concrete fails
Pot Life (77 degrees, 1 quart mass)	2 hours
Pot Life is reduced by increasing temperature and/or mass.	

WARRANTY INFORMATION

Arizona Polymer Flooring guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. ARIZONA POLYMER FLOORING MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Arizona Polymer Flooring shall not be liable for damages caused by application of its products over concrete with excessive moisture vapor transmission or alkalinity. Arizona Polymer Flooring shall not be liable for any injury incurred in a slip and fall accident. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product.

HIGH PERFORMANCE CONCRETE COATING SYSTEM

GENERAL INFORMATION

Moisture Vapor Emissions Precautions

All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride and relative humidity probe testing to determine if excessive levels of vapor emissions are present before applying any coatings. APF can supply moisture remediation products. Consult our technical service department. Arizona Polymer Flooring and its sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

Surface Preparation

Concrete must be cured 30 days and be clean and structurally sound. Surface may be damp, but standing water should be removed. Concrete should be shotblasted, acid etched or diamond ground to achieve a minimum profile CSP2 (similar to 100 grit sandpaper). In general, adhesion increases with increasing profile. **If acid etched, use of a floor machine with a nylogrit brush is required. Etched surface must be neutralized with ammonia and water or APF Super Base Neutralizer and water.** If diamond ground, 20/30 grit diamonds should be used. Vacuum twice to remove dust created by grinding. Concrete dust left in the pores can compromise adhesion. Exterior surfaces should be pressure washed following grinding.

Previously coated surfaces must be mechanically cleaned and abraded with 80-100 grit sandpaper or sanding screen. If applied over acid stains, surface should be scrubbed well to remove acid residue. Neutralize using APF Super Base Neutralizer or ammonia and water. Rinse well with water.

Mixing Instructions

Mix only that amount of material that can be used in a two hour period. In very hot weather mix smaller batches to control the pot life. Premix Parts A before use. Combining ratio is 8 parts A to 1 part B (1 gallon to 1 pint). Proportion the amounts carefully and mix for 2 full minutes using a drill mixer, scraping the bottom and sides of the mixing vessel. If using Color Fuse pigment dispersions, use no more than 6 oz. per mixed gallon and mix well.

Application Recommendations

Polyurethane 525 Primer is normally applied as received, but may be thinned with water up to 15% if desired. Product may be applied by pump-up sprayer and backrolled, or out of a 5 gallon pail using the dip and roll method. In any case, backrolling is necessary to insure optimal substrate wetting. Use a ½ or ¾ inch nap roller cover. Apply the primer liberally – do not “stretch” the material. Optimal coverage is between 200-250 sq. ft. per gallon.

Handling Precautions

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin; wear protective gloves. Read Material Safety Data Sheet before using.