

SYSTEM DESCRIPTION

VaporSolve® 100 LP System is a specially formulated 100% solids epoxy coating designed to comply with ASTM F-3010 and is for use over concrete with high moisture levels for the purpose of isolating the concrete from moisture sensitive flooring. When used without a primer in a single coat application, it is referred to as the VaporSolve Basic System. This system should only be used over concrete that has never been treated with reactive silicate curing compounds or densifiers. VaporSolve 100 LP has been formulated with low viscosity and excellent substrate wetting capabilities to promote penetration and adhesion. The special hydrophobic curing agent allows for adhesion to damp or wet concrete. This product will cure fully even when applied underwater. In addition, VaporSolve 100 LP is based on Bisphenol F epoxy which gives the material enhanced chemical crosslinking over products based on standard Bisphenol A epoxy. More crosslinking helps to reduce the coating's moisture permeability and increases its long term resistance to water and alkalinity. The material contains no plasticizers, phenols or unreacted amines that could migrate out of the cured coating and trigger osmotic blistering. The product may be applied at temperatures between 55-100°F.

100% solids epoxies are more prone to adhesion failure than properly formulated water-based epoxies when applied to silicate contaminated concrete. If silicate materials have been previously applied to the concrete, or if the history of the concrete cannot be positively determined, use VaporSolve Primer underneath VaporSolve 100 LP. The VaporSolve materials are designed to remediate all concrete moisture problems, regardless of severity. These systems may be used in new construction settings when a schedule must be met, yet the concrete is not dry enough to install moisture sensitive flooring. They can be used over concrete with known moisture problems and over concrete placed without a vapor retarder as a means of preventing future moisture problems.

CHEMICAL COMPOSITION

Modified Bisphenol F epoxy crosslinked with a hydrophobic amine curing agent. Cured product contains no unreacted, migrating components.

FEATURES & BENEFITS

- Effective Regardless of Moisture Levels
- Complies with ASTM F-3010
- Success Rate Greater Than 99%
- Easy Installation

COLORS

- VaporSolve 100 LP System is available in Clear.
- Available in pre-measured 1 and 3 gallon kits only.

PRODUCTS

VaporSolve 100 LP and VaporSolve Joint Filler.

SURFACE PREPARATION

Surface must be absolutely free of grease, oil and other contaminants. Remove these contaminants by scrubbing with APF Orange Clean using a floor machine and nylogrit brush. When surface is clean and dry, shot-blast using a 50/50 blend of 280/330 shot. Floor must be cross-hatched (North-South, East-West) double-blasted to achieve a CSP 3-4 profile (texture similar to 60-80 grit sandpaper). When shot-blasting has been completed, vacuum surface thoroughly.

PHYSICAL PROPERTIES

Mixing ratio, by volume:	Supplied in pre-measured kits
Solids Content:	100%
Viscosity (cps, 77° F):	400
Hardness, Shore D ASTM D 2240:	80
Volatile Organic Compounds:	None
Pot life (1 qt. mass at 77 degrees):	30 minutes
Cure times (77 degrees)	
Dry to touch:	6 hours
Final flooring application:	12 hours

**Pot life is reduced by increasing temperature and/or mass. Cure times are shortened by higher temperatures and extended by cooler temperatures.*

PERFORMANCE PROPERTIES

Permeability, one coat over concrete at 100 sq. ft./gallon
ASTM E 96 Water Method:
0.0333 perms (grains/h/ft²/in. Hg)

Adhesion to concrete ASTM D 4541:
500 psi -concrete fails before loss of bond

Resistance to alkalinity, (ASTM D 1308) (film exposed to 35% solutions of potassium hydroxide and sodium hydroxide for 60 days):
No visual change, 0.09% weight gain

CHEMICAL RESISTANCE

Refer to Arizona Polymer Flooring Chemical Resistance Guide for full system chemical resistance.

INSTALLATION

Please refer to VaporSolve 100 LP installation guidelines for information and instructions.

LIMITATIONS

- Must be applied over VaporSolve Primer if silicate contamination of the concrete is a possibility.
- Concrete must be clean and have a SCP profile of 3-4 (texture similar to 60-80 grit sandpaper).
- Must be applied at the specified film thickness.
- 100% solids epoxy coatings applied over shotblasted, unprimed concrete may exhibit outgassing bubbles. These bubbles are self-sealing and have been proven not to reduce the effectiveness of the coating.

WARRANTY

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 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.