

# VaporSolve® Fresh Concrete

TECHNICAL DATA SHEET

## DESCRIPTION:

VaporSolve® FC (Fresh Concrete) is a specially formulated water-based epoxy for use over freshly poured concrete to act as a high performance concrete curing compound and as a primer under VaporSolve® 100 material. VaporSolve FC has been formulated with very low viscosity and surface tension to ensure excellent substrate wetting, penetration and adhesion. Its unique chemistry gives it excellent affinity for the moist, alkaline conditions found in freshly poured concrete. Its ability to hold moisture in fresh concrete far exceeds the capabilities of conventional curing compounds and results in better hydrated and stronger concrete.

When applied as a system, VaporSolve FC and VaporSolve 100 prevent moisture migration through the concrete slab and allow the application of moisture sensitive flooring after 12 hours. The use of this unique system eliminates the need for a sub-slab vapor retarder as well as the need for shot-blasting prior to the application of subsequent flooring or coatings.

## USES:

- Remediation of concrete moisture
- For use on freshly poured concrete
- For concrete that has been placed without a vapor retarder
- Future moisture prevention

## CHEMICAL COMPOSITION:

Modified Bisphenol F epoxy crosslinked with a water-soluble amine. System modified with a saline adhesion promotor.



## MOISTURE VAPOR EMISSIONS PRECAUTIONS:

All 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 testing in compliance with ASTM F1869, or relative humidity probe testing in compliance with ASTM-F2170, to determine if excessive levels of vapor emissions are present before applying any coatings. Arizona Polymer Flooring offers **S-1300 Pene-Krete®** for cementitious overlay products and **VaporSolve® Moisture Remediation** systems for resinous floor coatings. 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.

## MIXING:

VaporSolve FC is packaged in 2 gallon and ¾ gallon kits. Do not attempt to mix partial kits. Proper proportioning and homogenization are absolutely critical for success. Pour the entire contents of Part B into the Part A container. Drill mix for 1 full minute by the clock. If mixing a 2 gallon kit, add 2 ½ gallons of water to the mixed material. You will now have 4 ½ gallons of liquid in the 5 gallon pail. Mix again for 1 full minute by the clock. If mixing a ¾ gallon kit, pour the entire contents of Part B into the Part A container. Drill mix for 1 full minute by the clock. After initial mixing, add 1 gallon water and mix again for 1 full minute by the clock. Do not add water before the initial product mix. Be sure to move the drill around the mixing container scraping the sidewalls and bottom.

**Super-Krete Products is a Division of Arizona Polymer Flooring, Inc.**

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VaporSolve® Fresh Concrete 051916



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## APPLICATION RECOMMENDATIONS & COVERAGE:

Freshly poured concrete must be cured well enough to support foot traffic and agitation of the material with a floor machine using a nylogrit brush. Apply the mixed and reduced material by spray (pump-up, HVLP or airless) or by pouring out of a sprinkling can. A 4 ½ gallon kit of mixed and reduced product should be spread over a 500 sq. ft. area. A 1.75 gallon kit of mixed and reduced material should be spread over 187 sq. ft. This equates to spreading the unreduced product at 250 sq. ft. per gallon.

Immediately after spreading the product, it must be worked into the fresh concrete with the floor machine using a nylogrit brush. Be sure to overlap on each pass. Immediately after scrubbing, a mechanic in rubber boots must finish roll the surface with a ¾" nap roller. If the material on the floor has become difficult to roll, a light spray with water will "refresh" the product and rolling will be easier.

## SHELF LIFE:

VaporSolve Fresh Concrete has a shelf life of 1 year when properly stored in an unopened container. Material should be stored at 55°-90° and no greater than 50% humidity. Ensure all lids are tightly sealed to ensure the longest lasting shelf-life.

## PRECAUTIONS:

- *Handling Precautions:* Use only with adequate ventilation or appropriate cartridge type respirator. Avoid contact with skin, wear protective gloves. Read Safety Data Sheet before using.
- *Slip and Fall Precautions:* OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slip-resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Arizona Polymer Flooring recommends the use of angular slip-resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Arizona Polymer Flooring or its sales agents will not be responsible for injury incurred in a slip and fall accident.

## TECHNICAL INFORMATION:

### Physical Properties

Mixing Ratio, by Volume	Supplied in pre-measured kits only
Solids Content (as received)	59%
Solids Content (after water reduction)	27%
Viscosity (after water reduction)	15 cps
Volatile Organic Compounds	None
Pot Life (77° F)	1 hour

### Cure Times (77 degrees)

Recoat with VaporSolve Joint Filler or VaporSolve 100	12 hours
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### Performance Properties

Surface Tension (dynes/cm)	20
Adhesion to Fresh Concrete	550 psi – concrete fails
Resistance to Alkalinity ASTM D 1308 (coating exposed to 35% solutions of potassium hydroxide and sodium hydroxide for 60 days)	No visual change, 0.12 weight gain

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## LIMITATIONS:

- To avoid the need for substrate profiling, product must be applied over freshly poured concrete (within 24 hours of placement). If this window is exceeded, surface must be mechanically prepared by light shot-blasting.
- Coating must be applied at specified thickness and worked into the surface.
- If the 10 Year Gold Warranty has been purchased, application must be done by a factory approved contractor or under the supervision of a Super-Krete Products technical representative.
- Do not apply if concrete could freeze before the building is climatized.

## 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 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.

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