



SunVap FC (Fresh Concrete)

PRODUCT DESCRIPTION AND USE

SunVap 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 SunVap 100 material. SunVap 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, SunVap FC and SunVap 100 prevents moisture migration through the concrete slab and allows 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.

Chemical Composition

Modified Bisphenol F epoxy cross linked with a water-soluble amine. System modified with a silane adhesion promoter.

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.
- Do not apply if concrete could freeze before the building is climatized.

TECHNICAL DATA

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°F)	
Recoat with SunVap Joint Filler or SunVap 100.....	12 hours

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

GENERAL INFORMATION

Mixing Instructions

SunVap FC is packaged in 2 gallon and $\frac{3}{4}$ 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 one full minute **by the clock.** If mixing a two gallon kit, add 2 $\frac{1}{2}$ gallons of water to the mixed material. You will now have 4 $\frac{1}{2}$ gallons of liquid in the 5 gallon pail. Mix again for one full minute **by the clock.** If mixing a $\frac{3}{4}$ gallon kit, pour the entire contents of Part B into the Part A container. Drill mix for one full minute **by the clock.** After initial mixing, add 1 gallon water and mix again for one 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.

Application Instructions

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 $\frac{1}{2}$ 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 $\frac{3}{4}$ inch 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.

After a 12 hour cure, seal around pipes, conduits and other penetrations with SunVap Joint Filler (Fast Cure). Apply SunVap 100 at 200 sq. ft. per gallon to complete the curing/moisture remediation system. Low permeability flooring or coating systems may be applied after the SunVap 100 has cured for 12 hours.

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.

WARRANTY INFORMATION

Sundeck Products USA, Inc. 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. SUNDECK PRODUCTS USA, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Sundeck Products USA, Inc. shall not be liable for damages caused by application of its products over concrete with excessive moisture vapor transmission or alkalinity. Sundeck Products USA, Inc. 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.

