



VEXCON
CHEMICALS, INC.

Concrete solutions for architects, engineers and builders since 1974
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POWERCOAT® PRIMER WATER BASE CLEAR AND COLOR

ADVANCED CURE, SEAL, AND PRIMER FOR EPOXIES AND URETHANES
STEP 1 OF POWERCOAT EPOXY SYSTEM

DESCRIPTION

POWERCOAT® PRIMER WATER BASE is the answer to the question, "How can concrete be easily and economically cured prior to the application of epoxies or urethanes?"

PowerCoat Primer Water Base is a liquid membrane-forming curing and sealing compound manufactured using a 100% modified styrene acrylic polymer containing functional groups which will combine chemically with water based epoxy or urethane polymers. This unique and innovative curing membrane meets the requirements of ASTM C-1315 Type I or Type II Class B and can be re-coated without removal by most epoxy and urethane floor paints and finishes.

Since the PowerCoat Primer Water Base co-reacts with epoxy and urethane resins, the bonds formed between it and the epoxy or urethane are much stronger than the bonds formed between epoxies or urethanes and concrete which are subject to hydrolysis and alkali attack. The modified functional styrene acrylic polymer is a member of a class of materials with excellent adhesion to concrete.

Our in-house and independent laboratory testing has shown that most standard 100% epoxy and urethane finishes when applied to cured concrete, scored, and immersed in water overnight will lose their bond to the concrete and will easily flake off. PowerCoat Epoxies, when applied over concrete that has first been cured or sealed with PowerCoat Primer Water Base, scored, and immersed in water overnight and for extended periods of time, do not lose their bond, flake, or peel.

PowerCoat Primer Water Base also provides an excellent base for most adhesives, paints, and a variety of other topcoats. PowerCoat Primer Water Base Color can be faux painted, mottled, or incorporate other design techniques, then top coated with PowerCoat Epoxy Water Base, yielding a distinctive high performing decorative floor.

BENEFITS

- Available in clear and 15 standard and custom colors
See Vexcon Color Systems Chart
- Match colored concrete floors, shake-on, or chemically treated floors
- Apply to new concrete for fast track project completion
- Provides for complete development of concrete's wear resistance and strength properties
- Does not blush or whiten when applied to damp surfaces
- Prevents efflorescence, dusting, and spalling
- Aids in keeping floors cleaner during construction
- Low odor

APPLICATION

- Thoroughly mix with jiffy mixer before using or placing in the spray equipment's reservoir.
- The product is supplied ready to use. Do not dilute with water or solvents.
- Apply by low-pressure sprayer with solvent resistant fittings. If not available, use a roller. If applying by roller for best results use Vexcon's **EvenFlow Applicator** or ¼" nap mohair-type, lint free, solvent resistant roller.
- Use a roller pan to take off excess product. Do not dip and Roll, or pour and spread.
- **IMPORTANT:** PowerCoat Primer Water Base, when dry, should have a uniform glossy appearance. If there is an appearance of gloss variation, a second thin coat of Primer is always recommended. Two coats at the recommended coverage rate are preferable to one thick coat. See Second Coat section. For color versions, a second light coat is always recommended.

SURFACE PREPARATION EXISTING CONCRETE

The concrete surface must be properly repaired, structurally sound and cleaned. Use Vexcon's surface prep and cleaning products to properly clean the surface prior to application.

- To remove coatings such as epoxies, sealers, and curing compounds use **StarSeal EF Concrete Stripper**.
- The concrete shall be cleaned with **StarSeal EF Degreaser & Cleaner** to remove any dust, dirt or debris and allowed to dry for a minimum of 24 hours after cleaning.
- To remove efflorescence or to etch the surface for improved material penetration use **Certi-Vex Etch & Efflorescence Remover**.
- There should be no freestanding water on the surface when applied.
- Large cracks should be repaired using **PowerCoat Epoxy Joint Sealant**.

SEALING EXISTING CONCRETE

- Prior to application a test area must be performed to determine proper application rate and required surface preparation.
- To determine that the concrete is penetrable, perform a water absorbency test by applying water to a representative portion of the prepared concrete floor. A properly prepared surface when dry will immediately absorb clean water without any surface beading effects.
- If required use **Certi-Vex Etch & Efflorescence Remover** to improve sealer penetration. Apply one coat of PowerCoat Primer at 200-300 sq.ft./gal (5.0-7.5 m²L) and allow to dry for a minimum of 4 hours and no more than 48 hours before applying any PowerCoat Epoxy coating.

CURING AND SEALING NEW CONCRETE

- Apply PowerCoat Primer Water Base as soon as possible after the concrete has received final finishing, just as the water sheen disappears.
- If application is delayed, the concrete must be kept wet (preferably by water spray-mist) until the curing coat can be applied.
- Coat uniformly leaving no gaps, slips or excess, at a rate of 200-300sq.ft./gal. (5.0-7.5 m²L).
- Let the concrete cure a minimum of 72 hours before application of **PowerCoat Epoxy HD Water Base**. **PowerCoat Epoxy LD Water Base** may be applied 24-72 hours after application of primer.

SECOND COAT

A second coat may be required if the first coating is worn, damaged or gloss variation. Surfaces that have been sealed with PowerCoat Primer should be cleaned of construction dust, mortar, etc. by sweeping, washing and drying thoroughly. Apply a thin coat of PowerCoat Primer to the clean dry surface at 300-400sq.ft./gal (5.0-7.5 m²L). Let PowerCoat Primer dry a minimum of 4 hours and no more than 48 hours before applying any PowerCoat Epoxy coating.

STAINING CONCRETE

PowerCoat Primer can be used as a stain on concrete by applying lightly or wiping to achieve degree of stain. Apply according to instructions above. A second coat is recommended. Apply PowerCoat Epoxy Water Base over Primer Color.

SPECIAL NOTES

- May show rubber burns
- This product will cause bleeding on bituminous surfaces
- May enhance mottling of colored surface
- Not gasoline resistant
- Equipment clean up: Use **Certi-Vex Equipment Cleaner**, flush with water.
- Do not use with topcoats that contain large amounts of ketones, which may lift the PowerCoat Primer.
- For PowerCoat Primer Color, same lot numbers should be used throughout the project. If lot numbers differ, box-mix prior to use.
- PowerCoat Primer Color must be thoroughly mixed prior to each use.
- Do not apply below 50°F (10°C)
- Keep from freezing.
- Shelf Life: If properly stored in its original sealed container, one year from date of manufacture. Rotate your stock.
- For use by experienced applicators
- Proper application of Vexcon material is the responsibility of the installer or user. Telephone consultation and/or field visits by Vexcon personnel are for the sole purpose of making technical recommendations only, and not for providing quality control or supervision on location.

PACKAGING

PowerCoat Primer is available in 55 gallon drums and 5 gallon pails.

SPECIFICATIONS/COMPLIANCE

VOC - <300 grams/liter or 2.50 #/gal. (Clear / Pigm.)

- Meets:
 - US EPA AIM-Concrete Curing & Sealing Compounds
 - OTC- Waterproofing Concrete/Masonry Sealers
 - LADCO- Waterproofing Concrete/Masonry Sealers
 - Canada- Waterproofing Concrete/Masonry Sealers
- LEED NC category/points: For detailed information visit vexcon.com/green
 - EQ 4.2 – 1 point
 - MR 2.1/2.2 – 1 point
 - MR 5.1/5.2 – 1 point
- ASTM C309, Type 1 Class A&B
- ASTM C1315 Type 1 (clear) or Type II (pigmented) Class B
- USDA requirements for paints and coatings for use in federally inspected meat and poultry plants
- Meets the requirements of the Tile Adhesion Test of the Resilient Tile Institute
- CSI reference: 09 96 56

Test reports are available upon request.

INDEPENDENT LABORATORY TEST RESULTS

DL Laboratories Report #DL- 10760B

PowerCoat Primer applied at 200sq.ft./gal on mortar panel, topcoated with PowerCoat Epoxy.

ASTM D 4541-Adhesion Test

Primed 395 psi Unprimed 350 psi

ALL breaks concrete failure

Federal Spec TTC 535, B Section 3.4.10

6 hours steam immersion

PHYSICAL PROPERTIES

Property	Clear	Color
• Dry to touch	90 minutes	90 minutes
• Dry tack free	60 minutes	60 minutes
• Moisture Retention	Passes	Passes
• Solids:	25%	42%

Note: Dry time and curing time depends on air temperature and film thickness. All calculations based upon 68-77°F (20-25°C). Low temperatures and relative humidity will extend dry time.

HEALTH AND SAFETY

- Use only with adequate ventilation
 - If swallowed, do not induce vomiting.
 - Use of gloves, goggles and other protective clothing is advised when using this product.
 - Use of respirators is advised when using in confined areas.
- Vexcon MSDS #CP100 is an integral part of the safety and application of our product. A short synopsis is provided in this product data sheet. Before using product obtain a copy of the MSDS from your distributor or by contacting Vexcon Chemicals.

CONTACT US @

Additional product information, technical assistance, and customer services are available by contacting Vexcon Chemicals directly or our distributors.

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WARRANTY

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