VEXCON CHEMICALS, INC.
Performance Construction Chemicals

MOISTUREBLOC® VAPOR REDUCTION PRIMER FT STEP 1

Fast Track • Moisture Protection of Adhesives • Low Odor
TT-C-555B AND TT-P-001411
VOC content 296 gr./liter or 2.47#/gal. - Concrete Protective Coating - USEPA
Waterproofing Concrete Sealer - OTC

DESCRIPTION

MOISTUREBLOC® VAPOR REDUCTION PRIMER FT STEP 1 is part of Vexcon's MoistureBloc Vapor Reduction System, which provides a fast and economical solution to preventing floor covering adhesion failure due to moisture. This system is guaranteed to reduce moisture vapor emission rates ranging from 12-15/# readings to below 3#/1000 sq.ft./24hrs, approximately 75%-85% based on ASTM E-1907 (ASTM F1869), or more depending on temperature, humidity, ground water levels and rainfall amounts. MoistureBloc can be applied to existing and new concrete surfaces curing the concrete and protecting the flooring for a quick and easy installation. A concrete slab which exhibits high moisture vapor emission rates results per ASTM E-1907 (ASTM F1869) Calcium Chloride Test (greater than 3.0#/ 1000 sq. ft./24hrs.) is coated with MoistureBloc Primer Step 1. Step 1 which is followed with **MoistureBlocTopcoat Step 2**, improves floor covering adhesion, see data sheet #CP116B. For re-active adhesives, use MoistureBloc Step 3 in place of Step 2, see data sheet #CP116C.

BENEFITS

- Fast track flooring installation -18 hours from start to flooring installation
- Low odor
- Withstands 576 #/sq.ft. of hydrostatic pressure
- Apply directly to fresh concrete (< 28 days old)
- Resistant to acids, alkalis and reduces the moisture environment which allows mold and fungus to grow
- One coat ready mixed application
- Suitable for low temperature application
- Low per square foot cost
- Reduces moisture vapor readings ranging from 12-15 lbs
- Cures new concrete for fast installation
- Alkali Blocker
- Warranty available

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.

- Use **MoistureBloc Adhesive Remover** to remove old adhesives and floor waxes prior to application of the vapor reduction system.
- To remove coatings such as epoxys, sealers and curing compounds use **Certi-Vex Concrete Stripper**.
- The floor shall be cleaned with **Certi-Vex Super 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 the vapor reduction system is applied.
- Hairline cracks should be repaired using **Powercoat Epoxy Joint Sealant.**

APPLICATION EXISTING CONCRETE

Vapor reduction system shall consist of the following products applied in accordance with the following procedures and methods:

- After proper surface preparation, the concrete shall be coated with Vexcon MoistureBloc Primer Step 1, applied by sprayer or if rolling, for best results use Vexcon's **EvenFlow Applicator** or 1/4" nap roller, at a rate not to exceed 150-160 sq. ft. per gallon, ensure that all pinholes and voids are filled. Allow to dry for a minimum of 12 hours.
- After 12 hours, the concrete shall be roller coated with MoistureBloc Topcoat Step 2 applied at a rate not to exceed 240-250 sq. ft. per gallon.
- The entire system shall be allowed to fully cure out and dry for a minimum of 6 hours prior to the application of floor covering or E1907 testing. (It is required that ASTM E-1907 test be run on the MoistureBloc coated concrete prior to applying floor covering to determine that the water vapor levels have been reduced to a acceptable level. Vexcon will provide additional material if required free of charge if the initial application does not reduce the vapor to less than 3 #/1000 sq.ft./24 hrs.)

Many waterbased adhesives require a portion of the water to go into the concrete to help achieve quick tack time, this water will not go through the MoistureBloc System. The tack time of each adhesive should be determined prior to applying the tile, this can vary as much as 100% vs application of the adhesive on concrete.

APPLICATION NEW CONCRETE

- Apply as soon as possible after the concrete has received final finishing, just as the water sheen disappears. If application is delayed concrete must be kept wet (preferably by water spray-mist) until MoistureBloc can be applied.
- If concrete is allowed to dry use Certi-Vex Concrete Etch & Efflorescence Remover to clean and prepare the surface.
- Apply one coat of MoistureBloc Primer Step 2 @ 300 sq.ft./gal. Allow to dry. Continue application as directed for Existing Concrete.

APPLICATION AS BASE FOR CEMENTITIOUS OVERLAYMENTS:

The use of MoistureBloc System as a vapor reduction system under cementitious flooring systems must follow the directions below:

1. **Certi-Vex Envio® Bond**, data sheet #RP101 must be applied over MoistureBloc Step 2 in accordance with manufacturers directions as a primer bonding agent for the cementitious products.
2. The latex primer system for the cementitious manufacturer can be used if designed as a bonding agent to concrete.

ANALYSIS

MoistureBloc, when tested in accordance with TT-P-001411, will withstand greater than 576 # / sq./ft. of Hydrostatic pressure and without allowing water to come through the film and breathe through 1.5 metric perms of water vapor or 1.4 #/1000sq.ft./24 hrs.As an ASTM C-1315, Type 1 Sealer at a 250 sq. ft. /gal. will breathe through less than 1.06 # water per 1000 sq.ft./24 hrs.

LABORATORY TESTS

- Bee Laboratories
  - Mortar and cured concrete samples, applied with the MoistureBloc Vapor Reduction System and tested by ASTM E-1907 while the bottom of the block is immersed in water, show a reduction on average of 75% in the water vapor. See test report #TN178. Full test report is available by request.

- DL Labs 14160
  - Pull off Adhesion – ASTM D4541 – 425 psi
  - Scrape Adhesion – ASTM D2197 – 2.0 kgs
  - Impact Resistance – ASTM D2794 – 5 lbs
  - Flexibility Rod – 1/8" – ASTM D522 – No cracks
- Case Consulting Labs Slip Resistance
  - ASTM D2047– .68 – Non-Slip

SPECIFICATIONS/COMPLIANCE

- Meets USEPA AIM and OTC VOC regulations
- Federal Specifications TT-C-555B, for interior and exterior surfaces
- TT-P-001411 for a copolymer resin cementitious paint for waterproofing concrete
- ASTM C 309 type 1 class A&B

WARRANTY

MoistureBloc Vapor Reduction Primer System is covered by a five-year material replacement warranty. Contact Vexcon for complete warranty information.

SAMPLE ARCHITECTURAL SPECIFICATION

Concrete will be coated with MoistureBloc Primer Step 1 as manufactured by Vexcon Chemicals, Inc., a modified acrylic that meets the requirements of Federal Spec. TTC-555B, VOC requirements and TT-P-001411. Surface will be coated at 150-160 sq.ft/gal. in accordance with manufacturers recommendation in product data sheet #CP116A to provide reduction of moisture vapor from concrete at approximately 75-85%.

SHELF LIFE

If properly stored in its original sealed container, three years from date of manufacture. Rotate your stock.

SPRAYING EQUIPMENT INFORMATION

- Electric Graco Ultra 1000
- Air Graco Bulldog 30:1
- Gas Graco 5000

Spray equipment must be cleaned and maintained in accordance with manufacturer's directions. Keep equipment clean using Vexcon **Certi-Vex Equipment Cleaner**.

PACKAGING

MoistureBloc Primer Step 1 is available in 55-gallon drums and 5-gallon pails.

VITAL STATISTICS

- Flash Point 106º F (41º C) TCC
- Boiling Point 310-495º F (154-257º C)
- Autoignition Temp 473º F (245º C)

Use foam, carbon dioxide and dry chemicals as extinguishing media for fires. Water may be used to reduce the rate of burning and to cool containers.

PHYSICAL PROPERTIES

- Weight solids 75-76%
- Dry time Approx. 4 hr.
- Wt/gal 12.1 #/gal.

HEALTH AND SAFETY

- Use of respirators is mandatory when using this product in confined areas.
- 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.

Vexcon MSDS #CP116A is an integral part of the safety and application of this product. Before using product, obtain a copy from your distributor or contact Vexcon Chemicals.

CONTACT US @

Additional product information, technical assistance and customer service is available by contacting Vexcon Chemicals directly or our distributors**.**

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