



MOISTUREBLOC® EMULSION VAPOR REDUCTION PRIMER STEP 1

Mildew, Algae, Bacterial and Moisture Protection of Adhesives MEETS TT-C-555B AND TT-P-001411

Voc Content: 53 gr/liter or 0.44 #/gal. - Concrete Protective Coating

DESCRIPTION

MOISTUREBLOC® EMULSION VAPOR REDUCTION PRIMER STEP 1 is part of Vexcon's MoistureBloc Vapor Reduction System, which provides a economical solution to preventing floor covering adhesion failure due to moisture. This system is designed 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 emission results per ASTM E-1907 (ASTM F1869) Calcium Chloride Test (greater than 3.0#/1000 sq. ft./ 24 hrs.) is coated with MoistureBloc Emulsion Vapor Reduction Primer Step 1. Step 1 is followed with **MoistureBloc Emulsion Vapor Reduction Topcoat Step 2**, which improves floor covering adhesion, see data sheet #CP115B. Reactive adhesives, use MoistureBloc Emulsion Vapor Reduction Topcoat Step 3 in place of Step 2, see data sheet # CP115C.

BENEFITS

- 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
- Low per square foot cost
- Cures new concrete for fast installation
- Reduces moisture vapor readings ranging from 12-15 lbs
- Alkali Blocker
- Minimal odor
- Protects adhesive from moisture vapor degradation
- 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 slab shall be coated with MoistureBloc Emulsion Primer Step 1, applied by sprayer or if rolling, for best results use Vexcon's **EvenFlow Applicator** or ¼ " nap roller, at a rate not to exceed 160-180 sq. ft. per gallon and allowed to dry for a minimum of 24 hours.
- Then apply a second coat of MoistureBloc Emulsion Primer Step 1 at a rate of 160-180 sq. ft. per gallon at a 90 degree angle to the application direction to ensure that all pinholes and voids are filled, and allowed to dry.
- After 24 hours, the concrete shall be roller coated, with MoistureBloc Emulsion Topcoat Step 2 applied at a rate not to exceed 140-150 sq.ft. per gallon.
- The entire system shall be allowed to fully cure out and dry for a minimum of 24 hours prior to the application of floor covering or 72 hours prior to E1907 testing. (It is required that ASTM E-1907 test be run on the MoistureBloc Emulsion 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.)

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 Emulsion Step 2 @ 300 sq.ft./gal. Allow to dry. Continue application as directed for Existing Concrete.

APPLICATION AS BASE FOR CEMENTIOUS 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 Moisture Bloc Step 2 or Step 3 in accordance with manufacturers directions as a primer bonding agent for the cementitious product.
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 TTP 1411, 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# / 1000 sq.ft./24hrs. As an ASTM C-1315, Type 1 sealer at a 150 sq. ft. /gal. will breathe through less than 1.77 # water per 1000 sq.ft./24 hrs.

LABORATORY TESTS

- Bee Laboratories
 - Mortar and cured concrete samples, applied with the MoistureBloc Emulsion 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. Full test report is available by request.

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 and masonry walls
- ASTM C 309, type 1 class A&B
- VOC: 296 gr./liter or 2.47 #/gal. – Concrete Protective Coating
- Meets LEED point standards for green building

WARRANTY

MoistureBloc Emulsion 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 Emulsion Vapor Reduction 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 90 sq.ft/gallon in accordance with manufacturers recommendation in product data sheet #CP115A to provide reduction of moisture vapor from concrete at approximately 75-85%.

SHELF LIFE

If properly stored in its original sealed container, two 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 **Certi-Vex Equipment Cleaner**.

PACKAGING

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

VITAL STATISTICS

Flash Point	200° F (41° C) TCC
Boiling Point	310-495° F (154-257° C)
Autoignition Temp	473° F (245° 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	67%
Dry time	4 hr.
Wt/gal	11.7 #/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 #CP115A is an integral part of the safety and application of this product. Before using product, obtain a copy from your distributor or by contacting 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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