



## MOISTUREBLOC<sup>®</sup> EMULSION ONE STEP VAPOR REDUCTION

Mildew, Algae, Bacterial and Moisture Protection of Adhesives  
VOC content 144 gr./liter or 1.20 #/gal. – Water Repellent Concrete Coating

### DESCRIPTION

**MOISTUREBLOC<sup>®</sup> EMULSION ONE STEP** provides a quick, easy to use and economical solution to preventing floor covering adhesive failure due to moisture. Independent testing confirms the product promotes resistance to mildew, algae and bacteria. The combination of reduced moisture vapor transmission and a film that is resistant to growth of mildew, algae and bacteria reduces problems under floor coverings. This system is guaranteed to reduce moisture vapor emission rates ranging from 8-9/# readings to below 3#/1000 sq.ft./24hrs, approximately 70% 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.) should be coated with MoistureBloc Emulsion One Step. Reactive adhesives, use MoistureBloc Reactive Emulsion One Step.

The system is based on unique technology of a breathable coating with excellent adhesion to concrete. MoistureBloc Emulsion One Step will protect adhesives from moisture vapor and alkali degradation.

### BENEFITS

- Easy one coat application
- Five year warranty available for use to 9# /1000 sq.ft./24hrs
- Apply directly to fresh concrete (< 28 days old)
- Minimal odor
- Resistant to acids, alkalis and reduces the moisture environment which allows mold and fungus to grow
- Protects adhesive from moisture vapor degradation
- Very low per square foot cost
- Cures new concrete for fast installation
- Reduces moisture vapor readings ranging from 8-9 lbs

### 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 product applied in accordance with the following procedures and methods.

- After proper surface preparation the concrete slab shall be coated with MoistureBloc Emulsion One Step, 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 140-160 sq. ft. per gallon and allowed to dry for a minimum of 12 hours. Ensure that all pinholes and voids are filled. (It is required that ASTM E-1907 test be run on the MoistureBloc Emulsion One Step coated concrete prior to applying floor covering to determine that the water vapor levels have been reduced to an 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 CEMENTITIOUS OVERLAYMENTS**

The use of MoistureBloc One Step 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 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 One Step when tested in accordance with ASTM E 96 will breathe 1.5 metric perms of water vapor or 1.4# / 1000sqft/24hrs.

## **INDEPENDENT LABORATORY TESTS**

- Bee Laboratories
  - Results on mortar and cured concrete samples, applied with the MoistureBloc Emulsion One Step 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 70% in the water vapor. This system functions to bring down E-1907 test results of 10#/1000sq.ft./24 hours to the limit of 3 #/1000 sq.ft./24 hrs.
- DL Labs 14160
  - Pull off Adhesion - ASTM D4541 – 500 psi
  - Scrape Adhesion – ASTM D2197 – 0.5 kgs
  - Impact Resistance – ASTM D2794 – 10 lbs
  - Flexibility Rod – 1/8” – ASTM D522 – No cracks
- Case Consulting Labs
  - ASTM D2047 - .68 – Non-Slip

## **SPECIFICATIONS/COMPLIANCE**

- Meets USEPA AIM and OTC VOC regulations
- ASTM C 309 type 1, class A&B
- VOC: 144 gr./liter or 1.20#/gal. –Water Repellent Concrete Coating
- Meets LEED point standards for green building

## **SAMPLE ARCHITECTURAL SPECIFICATION**

Concrete will be coated with MoistureBloc Emulsion One Step Vapor Reduction as manufactured by Vexcon Chemicals, Inc. Surface will be coated at 140-160 sq.ft/gallon in accordance with manufacturers recommendation in product data sheet CP114 to provide a reduction of moisture vapor from concrete at approximately 70%.

## **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 301
- 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 One Step 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 50%
- Dry time 4 hr.
- Wt/gal 9.5 #/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 CP114 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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