



Protect flooring installations from the ground up.

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MOISTUREBLOC[®] EMULSION ONE STEP VAPOR REDUCTION

MILDEW, ALGAE, BACTERIAL AND MOISTURE PROTECTION OF ADHESIVES

DESCRIPTION

MOISTUREBLOC 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 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 F1869 Calcium Chloride Test (greater than 3.0#/1000sq.ft./24 hrs.) should be coated with MoistureBloc Emulsion One Step. Reactive adhesives, use MoistureBloc Universal.

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

BENEFITS

- Reduces moisture vapor reading up to 9#/1000sq.ft/24 hrs. to under 3#.
- Adhesive ready in 12 hours.
- Easy one coat application.
- Five year warranty available for use to 9#/1000sq.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 8-9lbs.
- No blast tracking or sanding required if water test penetrates the concrete.

SAMPLE ARCHITECTURAL SPECIFICATION

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

SPECIFICATIONS/COMPLIANCE

VOC: <250 grams/liter or <2.09#/gal.

- Meets:
 - US EPA AIM-Waterproofing Sealers and Treatments
 - OTC-Waterproofing Concrete/Masonry Sealers
 - LADCO-Waterproofing Concrete/Masonry Sealers
 - Canada-Waterproofing Concrete/Masonry Sealers
 - CARB-Waterproofing Membrane
 - SCAQMD- Rule 1168- Architectural Sealant
- LEED NC category/points: For detailed information visit vexcon.com/green
 - EQ 4.1 – 1 point
 - EQ 7.1 – 1 point
 - EQ 7.2 – 1 point
 - MR 2.1/2.2 – 1 point
 - MR 5.1/5.2 – 1 point
 - ID 1 – 1 point
- CSI reference: 09 61 50, 07 26 13

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 epoxies, sealers and curing compounds use **MoistureBloc Stripper**.
- The floor shall be cleaned with **MoistureBloc Floor Cleaner** to remove any dust, dirt or debris and allowed to dry for a minimum of 24 hours after cleaning.
- 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 effect.
- To remove efflorescence or to etch the surface for improved material penetration use **StarSeal[®] Safe Etch** remover.
- Can be applied to damp surfaces, however do not apply over liquid water.
- Hairline cracks should be repaired using **MoistureBloc Flexible Joint Sealant**.

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 StarSeal Safe Etch to clean and prepare the surface.
- Apply one coat of MoistureBloc Emulsion Step 2 @ 300sq.ft./gal. Allow to dry. Continue application as directed for Existing Concrete.

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 140-160sq.ft. per gallon and allowed to dry for a minimum of 12 hours or 72 hours prior to running ASTM F1869. Use a roller pan to take off excess product. Do not dip and roll or pour and spread. Ensure that all pinholes and voids are filled. (Prior to applying adhesive after drying 72 hours it is required that ASTM F1869 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#/1000sq.ft./24 hrs.)
- **Many water based 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. If adhesive tack time may not be extended refer to the section "Application As Base for Cementitious Overlayments or Patching Products" of this data sheet.**
- 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.

APPLICATION AS BASE FOR CEMENTITIOUS OVERLAYMENTS OR PATCHING PRODUCTS

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

1. **MoistureBloc Surface Bond**, data sheet CP154 must be applied over Moisture Bloc 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.

FLOOR REPAIR AND RESTORATION

- **MoistureBloc SLU**- High strength and fast setting self leveling underlayment designed to level and smooth interior substrates prior to installation of finished flooring
- **MoistureBloc FP** - Self curing advanced polymer modified skimcoat leveling compound for patching and restoration of interior concrete floors.

NOTE: JOINTS

MoistureBloc and bonding agent/primer must be applied to joints prior to using cementitious patch or floor levelers to fill joints as a protection for compounds.

ANALYSIS

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

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**, flush with water.

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 F1869 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 ASTM F1869 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

SHELF LIFE

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

PACKAGING

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

VITAL STATISTICS

- Flash Point 225°F/107°C
- Boiling Point >200°F/>93°C
- Autoignition Temp 450°F/232°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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WARRANTY

Vexcon warrants that the goods supplied hereunder shall be of its standard quality and shall conform in all material respects to the sample which has been made available for testing by buyer prior to sale. As the EXCLUSIVE REMEDY for any breach of this Limited Warranty, Vexcon shall replace nonconforming goods or refund the purchase price. Since methods of use and application are beyond Vexcon's control, this Limited Warranty IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THOSE CONCERNING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS LIMITED WARRANTY IS ALSO IN LIEU OF ANY OTHER POSSIBLE LIABILITIES OF VEXCON, WHETHER ALLEGED TO ARISE BY AGREEMENT OR BY OPERATION OF LAW, RESPECTING THE SALE, APPLICATION, USE OR FUNCTION OF VEXCON'S PRODUCTS, INCLUDING BUT NOT LIMITED TO CLAIMS OR NEGLIGENCE, GROSS NEGLIGENCE, STRICT LIABILITY OR ANY OTHER TORT. IN NO EVENT SHALL VEXCON BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE, REAL OR PERSONAL, ATTRIBUTED TO ITS PRODUCTS, NOR FOR ANY EXCAVATION, REMOVAL, REAPPLICATION, DOWNTIME, CLEANUP, LOSS OF USE, LOSS OF OPPORTUNITY, LOSS OF MARKET VALUE, LOSS OF RENTAL VALUE OR FOR ANY LOSS OF PROFITS OR OTHER SPECIAL, INCIDENTAL, RESULTING, CONSEQUENTIAL OR EXEMPLARY DAMAGES. No person is authorized by Vexcon to assume for it any other liability of any kind in connection with the sale or use of products manufactured and sold by it, and there are no oral agreements or warranties collateral to or affecting any sale or use. All of the foregoing arises under the substantive law of Pennsylvania without regard to principles of conflicts of laws.