

MOISTUREBLOC[®] UNIVERSAL

MILDEW, ALGAE, BACTERIAL AND MOISTURE PROTECTION OF ADHESIVES
MEETS ALL CALIFORNIA VOC REGULATIONS • REACTIVE AND NON REACTIVE ADHESIVES

DESCRIPTION

MoistureBloc Universal provides a quick, easy-to-use, and economical solution to preventing floor covering adhesive failure due to moisture.

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

MoistureBloc Universal can be used with non-reactive as well as reactive adhesives such as urethane and epoxy water base systems.

Independent testing confirms that 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 as high as 8# to below 3#/1000 sq.ft./24hrs, approximately 63% based on ASTM F1869, or more depending on temperature, humidity, ground water levels and rainfall amounts.

MoistureBloc Universal can be applied to existing and new concrete surfaces, curing the concrete and protecting the flooring for a quick and easy installation.

BENEFITS

- Reduces moisture vapor readings ranging from 8#/1000 sq.ft./24 hrs to below 3#
- Can be used with reactive and non reactive adhesives
- Adhesive ready in 12 hours
- Easy one coat application
- Minimal odor
- Can be used on interior or exterior concrete
- Five year warranty available for use to 8#/1000 sq.ft./24hrs
- Apply directly to fresh concrete (<28 days old)
- Resistant to acids and alkalis; 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
- No shot blasting, blast tracking, or sanding required if water test penetrates the concrete.

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.

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 CURING

- 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 Emulsion Step 2 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 @ 300 sq.ft./gal. Allow to dry. Continue application with MoistureBloc Universal as directed for existing concrete. See Application Existing Concrete.

APPLICATION AS BASE FOR CEMENTITIOUS OVERLAYMENTS OR PATCHING PRODUCTS

The use of MoistureBloc Universal 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 MoistureBloc in accordance with manufacturer's 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.

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 Universal, 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. 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 or floor covering. Allow to dry for a minimum of 12 hours, or 72 hours prior to running ASTM F1869 on the MoistureBloc Universal coated concrete. This test will determine that the water vapor levels have been reduced to an acceptable level. If required Vexcon will provide additional material free of charge if the initial application, applied in accordance with manufacturer's recommendations, does not reduce the vapor to less than 3#/1000 sq.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. *Consult with Vexcon for compatibility of reactive adhesives for flooring. . If adhesive tack time may not be extended refer to the section "Application As Base for Cementitious Overlays 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.

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 floor surface defects

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 Universal when tested in accordance with ASTM E96 will breathe 1.5 metric perms of water vapor or 1.4#/1000sqft/24hrs.

INDEPENDENT LABORATORY TESTS

- BEE Laboratories#80328
 - Results on mortar and cured concrete samples, applied with the MoistureBloc Universal and tested by ASTM F1869 while the bottom of the block is immersed in water, show a reduction on average of 63% in the water vapor.
This system functions to bring down F1869 test results of 8#/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	0.5kg
• Impact Resistance	ASTM D2794	10 lbs
• Flexibility Rod – 1/8"	ASTM D522	No cracks
- Case Consulting Labs
 - ASTM D2047 - 0.68 – Non-Slip

SAMPLE ARCHITECTURAL SPECIFICATION

Basis of design: Concrete will be coated with MoistureBloc Universal as manufactured by Vexcon Chemicals, Inc. Surface will be coated at 140-160 sq.ft/gallon in accordance with manufacturer's recommendation in product data sheet CP118 to provide a reduction of moisture vapor from concrete at approximately 70%.

SPECIFICATIONS/COMPLIANCE

- VOC - <250 grams/liter or <2.08#/gal.
Meets:
 - USEPA AIM-Waterproofing Sealers & Treatments (600 g/L)
 - OTC-Waterproofing Concrete/Masonry Sealers (400 g/L)
 - CARB-Industrial Maintenance Coating (250 g/L)
 - SCAQMD Rule 1168-Architectural Sealant/Primer (250 g/L)
- 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
- ASTM C 309 Type 1, class A&B
- CSI reference: 07 26 13, 09 61 50

SHELF LIFE

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

PACKAGING

MoistureBloc Universal is available in 50-gallon drums and 5-gallon pails.

VITAL STATISTICS

Flash Point	200°F (4°C) TCC
Boiling Point of Solvent Portion	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 9.14 #/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 CP118 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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|--|--|
| • vexcon.com | • sales@vexcon.com |
| • techservice@vexcon.com | • Voice: 888.839.2661 |
| • customerservice@vexcon.com | • Fax: 215.332.9997 |

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 EXPRESSED 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, DOWN TIMES, 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.