## TECHNICAL DATA

# **MVM PRIME 5000**

Alkali-Resistant, Epoxy Moisture Control Barrier/Primer



## **DESCRIPTION**

MVM PRIME 5000 is a 2-component, 100% solids epoxy moisture barrier/primer system designed to effectively stop moisture vapor related problems on concrete prior to installing Spec-Chem underlayments or overlayments.

MVM PRIME 5000 also provides an excellent bond to concrete and can be applied to concrete as early as 5 days old where early application of floor covering is required.

Applications for MVM PRIME 5000:

- Prevents moisture related problems with floor covering over concrete floors
- Excellent primer for SpecChem Underlayments/ Overlayments

# FEATURES/BENEFITS

- One-Coat epoxy system
- Easy to spread/excellent coverage
- VOC Compliant, VOC = 0 grams/liter
- · Reduces moisture vapor for floor coverings
- ASTM E 96 = .06 perms @ 14 mils
- Excellent bond strength to concrete

#### **APPEARANCE**

MVM PRIME 5000 is a 2-component epoxy system consisting of 2 Parts A (resin) & 1 Part B (hardener). The cured coating will be a light gray

#### **COVERAGE**

Coverage rate is approximately 75-125 sq-ft per gallon. The concrete surface texture greatly affects coverage rates and final appearance.

<u>Material Requirements:</u> A one coat application using a coverage rate of 110 sq-ft per gallon per coat, will create a 14.5 mil coating.

## **APPLICATION**

Concrete Surface Preparation: New Concrete must be a minimum of 5 days old with all curing compounds and sealers removed. Concrete must have a minimum tensile strength of 150 psi.

The existing concrete must be clean, dry and sound. All oil, dirt, debris, paint and unsound concrete must be removed.

The concrete surface must be prepared mechanically using shotblast or other mechanical means to a minimum ICRI concrete surface profile of 3 (CSP #3). Acid etching is not acceptable.

<u>Joints and Cracks</u>: All dormant cracks and joints and should be filled using a 100% solids low viscosity high modulus epoxy or urethane such as SpecPoxy 500, 1000 or PolyFix and sand applied to refusal to the surface while the epoxy is still wet. Remove excess sand after the epoxy dries and before the MVM Prime 5000 is applied.

## **APPLICATION** (con't)

SpecChem cannot be responsible for issues regarding expansion, isolation or moving joints or cracks that may develop, shrink or expand after installation of MVM PRIME 5000.

<u>Recommended Tools:</u> Epoxy mixing paddle, low speed drill, short-nap paint roller or notched squeegee or long-nap paint roller, depending on smooth or uneven surfaces and paintbrush.

<u>Mixing:</u> All materials should be conditioned in the proper temperature range of 65°F to 85°F. Mix parts A and part B separately for one minute using a drill and mixing blade. For ease of mixing, add 1- Part B to 2- Parts A (not the reverse).

Mix the Part A and Part B together for 3 minutes. Once mixed, pour some of the epoxy back into the hardener container, mix for 30 seconds, then pour all of the contents back into the resin container, ensuring that no hardener residue remains unreacted. The epoxy must be well mixed to ensure proper chemical reaction. After mixing, place immediately on the prepared surface.

<u>Placement:</u> This product should be spread with a squeegee or notched squeegee at 110 sq-ft per gal (14.5 mils). After application, it is suggested the coating be back-rolled with a spiked roller to reduce surface imperfections, entrapped air and to improve bond.

Installing Directly to Flooring: Non-adhering and direct-bond flooring systems may be installed directly to unsanded MVM PRIME 5000 without use of an underlayment product. MVM PRIME 5000 must cure at least 4 hours. Installation of floor covering must not compromise MVM PRIME 5000 application in any way, and only adhesives suitable for use over non-porous substrates may be used.

Care should be taken to ensure that no absorption of any liquids, including water, solvents, or otherwise, into the MVM PRIME 5000 takes place. Extended curing time may be required, per manufacturer's recommendations, when installing pressure sensitive adhesives directly to MVM PRIME 5000.

Additionally, for adhesives specified for use over a porous substrate, a cementitious underlayment with a minimum thickness of 1/8" must be installed over MVM PRIME 5000.

<u>Barrier/Primer Applications:</u> When using MVM PRIME 5000 as a moisture barrier and as a sanded bonding primer for underlayments and overlayments, a second sanded application is recommended

**1st Coat:** Apply MVM Prime 5000 at 14.5 mils thickness with a notched squeegee and back roll ensuring approximately 110 sq ft per gal. Allow MVM Prime 5000 to dry for a minimum of 4 hours. Do not leave open for over 24 hrs before next step.



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## **APPLICATION** (con't)

**2nd Coat:** Apply an additional thin coat of MVM Prime 5000 or SpecPoxy 1000 at 10 mils and immediately broadcast minus #30 or #16/40 mesh sand uniformly until rejection. Use approximately 1lb sand per square feet of area.

Once broadcast is complete, avoid surface traffic for a minimum of 4 hours. Broom sweep and vacuum surface after 4 hours or whenever the epoxy has hardened and the sand is completely adhered, removing all loose sand, leaving an ideal bonding surface for SpecChem underlayment or overlayment systems.

Always install **SpecFlow** premium underlayment or **SpecLevel PCT** premium self-leveling overlayment when surface coated with MVM PRIME 5000 is not flat enough or smooth enough for direct installation of floor covering.

Type Application	Sand Broadcast Required:	Minimum Unsanded Thickness:	Approx. Application Rate/Gallon
Toppings (2 applications)	Yes	14 mils	100-110 sq. ft.
Direct Installation of Floor Coverings (No Underlayment)	No	14 mils	100-120 sq. ft.

## **TYPICAL TEST DATA**

The following results were developed under laboratory conditions based on 70°F application. The properties below are typical values, and should not be considered specifications.

Mix Ratio: 2-to-1 Mix Ratio

Permeability (ASTM

**E 96):** 0.06 perms @ 14 mils

Viscosity: approx. 250 cps

Working Time: 20 Minutes

Walkable: 4 Hours @ 75F

**Install Underlayment** 

**of topping:** Min. 4 hours

**Packaging:** 3.0 gal unit;15 gal units

Shelf Life: 2 years, properly stored/unopened

## **CLEAN UP**

Clean tools and equipment before the epoxy has hardened with solvent such as SpecChem SOLVENT 100, Orange Peel or Berry Clean. Do not allow to harden on equipment or mechanical removal will be required.

#### **PACKAGING**

3 gallon units (2 -1 gal. Part A & 1-gal. Part B) 15 gallon units (2 - 5 gal pails Part A, 1- 5 gal Part B)

## SHELF LIFE/STORAGE

The shelf life of properly stored MVM PRIME 5000 is two years from date of manufacture. Store MVM PRIME 5000 in its original containers and keep tightly closed in a cool, dry area. Do not allow the accumulation of water, dirt or other contaminants. Do not leave containers exposed to sun. Keep from freezing. Keep away from heat.

## **SPECIFICATIONS/COMPLIANCES**

MVM PRIME 5000 is USDA accepted.

## LIMITATIONS/PRECAUTIONS

- Store and condition the product indoors at 50°F to 80°F prior to application. Avoid application at air and floor temperatures below 50°F and high humidity conditions.
- Suitable for service temperature from 40F to 90F.
- Do not install over wood underlayments, gypsum-based underlayments, or concrete slabs subject to freeze-thaw cycles.
- Not suitable as a final wear surface. Flooring surface/ system must be installed and all expansion/control/moving joints must be honored and maintained.
- Epoxy components may cause irritation. Avoid contact with eyes and skin.
- Do not apply over hardened primer or old epoxy without proper surface preparation.
- Use in a well ventilated area, keep away from sparks and open flames.
- If HVAC intake ducts will distribute epoxy odor into adjoining occupied areas of the building, care should be taken to block these ventilation vents.

#### WARRANTY

# NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

#### WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

#### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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