TECHNICAL DATA SHEET

MVM PRIME 5000

Alkali-Resistant Epoxy Moisture Control Barrier/Primer

DESCRIPTION

MVM Prime 5000 is a two-component, 100% solids epoxy moisture barrier/primer system designed to stop moisture vapor-related problems on concrete before SpecChem underlayments or overlayments are installed. MVM Prime 5000 also provides an excellent bond to concrete and can be applied to concrete as early as 5 days old where early installation of floor coverings is required.

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.

USES

- Prevents moisture-related problems with floor coverings over concrete floors
- Excellent primer for SpecChem underlayments/overlayments

BENEFITS

- One-coat epoxy system
- Easy to spread; excellent coverage
- VOC compliant: 0 g/L
- Reduces moisture vapor for floor coverings
- ASTM E96: 0.06 perms at 14 mils
- Excellent bond strength to concrete
- Cures to a light gray

APPLICATION

Concrete Surface Preparation: New concrete must be a minimum of 5 days old, with all curing compounds and sealers removed, and must have a minimum tensile strength of 150 psi (1.0 MPa). Existing concrete must be clean, dry and sound; remove all oil, dirt, debris, paint and unsound concrete. Prepare the surface mechanically by shot blasting or other mechanical means to a minimum ICRI CSP 3. Acid etching is not acceptable.

Joints and Cracks: Fill all dormant cracks and joints with a 100% solids, low-viscosity, high-modulus epoxy or urethane such as SpecPoxy 500, SpecPoxy 1000 or Poly Fix, broadcasting sand to refusal while the epoxy is still wet. Remove excess sand after the epoxy dries and before applying MVM Prime 5000.

Recommended Tools: Epoxy mixing paddle, low-speed drill, short-nap roller or notched squeegee, or long-nap roller (depending on whether the surface is smooth or uneven), and paintbrush.

Mixing: Condition all materials to 65–85 °F (18–29 °C). Mix Part A and Part B separately for 1 minute with a drill and mixing blade. For ease of mixing, add 1 part B to 2 parts A (not the reverse), then mix together for 3 minutes. Pour some of the mixed epoxy back into the hardener container, mix for 30 seconds, then pour all of the contents back into the resin container so that no unreacted hardener residue remains. Place on the prepared surface immediately after mixing.

Placement: Spread MVM Prime 5000 with a squeegee or notched squeegee at 110 sq ft/gal (2.7 m^2/L), for a 14.5-mil coating. Back-rolling with a spiked roller is suggested to reduce surface imperfections and entrapped air and to improve bond.

Installing Directly to Flooring: Non-adhering and direct-bond flooring systems may be installed directly over unsanded MVM Prime 5000 without an underlayment, after a minimum 4-hour cure. Floor covering installation must not compromise the MVM Prime 5000 application in any way, and only adhesives suitable for non-porous substrates may be used. Make

sure no liquids (water, solvents or otherwise) are absorbed into the MVM Prime 5000. Pressure-sensitive adhesives installed directly over MVM Prime 5000 may require extended curing time per the manufacturer's recommendations. For adhesives specified for porous substrates, install a cementitious underlayment at least 1/8" (3 mm) thick over MVM Prime 5000.

Barrier/Primer Applications: When using MVM Prime 5000 as a moisture barrier and sanded bonding primer for underlayments and overlayments, a second, sanded application is recommended. 1st coat: apply MVM Prime 5000 at 14.5 mils with a notched squeegee and back-roll, at approximately 110 sq ft/gal (2.7 m^2/L); allow to dry a minimum of 4 hours, and do not leave open more than 24 hours before the next step. 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 to refusal (approximately 1 lb/sq ft / 4.9 kg/m^2). After broadcasting, avoid traffic for a minimum of 4 hours, then broom and vacuum the surface once the epoxy has hardened and the sand is fully adhered, removing all loose sand to leave an ideal bonding surface for SpecChem underlayment or overlayment systems.

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

Application type	Sand broadcast	Min. unsanded thickness	Approx. rate/gal
Toppings (2 applications)	Yes	14 mils	100–110 sq ft
Direct installation of floor coverings (no underlayment)	No	14 mils	100–120 sq ft

TECHNICAL DATA INFORMATION

The following results were developed under laboratory conditions at 70 °F (21 °C). They are typical values and should not be considered specifications.

Mix ratio (A:B)..... 2:1
Permeability (ASTM E96)..... 0.06 perms at 14 mils
Viscosity ..... approx. 250 cps
Working time..... 20 minutes
Walkable at 75 °F (24 °C) ..... 4 hours
Install underlayment or topping..... minimum 4 hours
Coverage 75–125 sq ft/gal (1.8–3.1 m^2/L); 110 sq ft/gal = 14.5 mils

COMPLIANCE/STANDARDS

- USDA accepted

PACKAGING

3 gal unit (two 1 gal / 3.79 L Part A + one 1 gal / 3.79 L Part B)

15 gal unit (two 5 gal / 18.9 L pails Part A + one 5 gal / 18.9 L pail Part B)

CLEANING

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

SHELF LIFE

Shelf life of properly stored MVM Prime 5000 is two years from the date of manufacture. Store in the original containers, 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 and away from heat.

LIMITATIONS

- Store and condition the product indoors at 50–80 °F (10–27 °C) before application. Avoid application when air and floor temperatures are below 50 °F (10 °C) or in high humidity. Suitable for service temperatures of 40–90 °F (4–32 °C).
- Do not install over wood underlayments, gypsum-based underlayments or concrete slabs subject to freeze-thaw cycles.
- Not suitable as a final wear surface. A flooring surface/system must be installed, and all expansion, control and 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 could carry epoxy odor into adjoining occupied areas of the building, block these 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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