MV EPOXY PRIMER

PRODUCT NAME

MV EPOXY PRIMER

MANUFACTURER

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PRODUCT DESCRIPTION

MV Epoxy Primer is a two-part, 100% solids epoxy moisture mitigation system. This moisture-tolerant and VOC-Complaint product limits the transmission of moisture, odor and other elements through concrete slabs.

WHY CHOOSE MV EPOXY PRIMER?

MV Epoxy Primer should be used when moisture vapor emission rates are high (up to 23 pounds / 1000 ft^2 / 24 hours when measured by the calcium chloride tests or up to 99% relative humidity when measured by humidity probe testing).

MV Epoxy Primer meets the requirements of ASTM F3010 standard practice of two-component, resin-based, membrane-forming moisture mitigation systems under resilient floor coverings.

MV Epoxy Primer may be applied to fresh or green concrete that has been poured and in place for 15 days (vs. 30 days).

MV Epoxy Primer is compatible with subsequent coats of pigmented MC Epoxy or UltraSpartic.

UNIQUE ADVANTAGES

- Fast cure / same day topcoat
- VOC-Compliant
- Excellent bond to dry or damp surfaces
- Easy to apply
- Single coat application
- Quick dry time
- Extremely smooth finish

PACKAGING

10-gallon Kit: 5-gallon Part A + 5-gallon Part B
(mix 1:1 ratio by volume)

COVERAGE RATES

Required coverage rate: 70-80 SF / gallon (20-23 mils)
Texture, absorption of surface and application processes will determine final coverage rates. Rough or porous concrete may require additional material.

SHELF LIFE

24 months unopened when stored at room temperature (59-77°F, 15-25°C)

TECHNICAL DATA

Mixing ratio (by volume)	1 Part A to 1 Part B	
Solids content	100%	ASTM D2369
VOC content	0 g/l, compliant to low VOC rule 1113 in all 50 states	Calculated
Gloss @ 60° angle	85-100	ASTM D523
Mixed viscosity	400-500 cps	ASTM 2196
Pot life	15 minutes (1-gal)	
Dry time @ 72°F, 10 mils		
To touch	4 hours	
Light foot traffic	4-6 hours	
Recoat window	4-24 hours	

ENVIRONMENTAL TESTING

Moisture Content: All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride testing (ASTM F1869) or plastic sheet testing (ASTM D4263) and relative humidity probe testing (ASTM F2170) to determine if excessive levels of moisture vapor emissions are present before applying any coatings.

Slabs on grade shall have a moisture vapor emission rate of less than 24 pounds / 1,000 ft^2 / 24 hours when measured by calcium chloride test and no more than 99% relative humidity when measured using in situ probes.

Moisture readings above 20 pounds / 1000 ft^2 / 24 hours or above 95% relative humidity must be approved by a UDT representative prior to application. Test the air temperature, relative humidity, and floor temperature in the area to be finished using a Psychrometer and Infrared Thermometer.

Air Temperature: MV Epoxy Primer must not be applied when the air temperature is above 85°F or below 60°F.

Relative Humidity (RH): MV Epoxy Primer must not be applied when the RH is above 90%.

Floor Temperature and Dew Point: MV Epoxy Primer must not be applied when the substrate (floor) temperature is less than 5° above the dew point. Monitoring the substrate temperature, indoor temperature and RH, and utilizing fans and/or dehumidifiers as needed will help correct or prevent existing or possible dew point conditions until the installation is complete.

FLOOR PREPARATION

Concrete slabs must be cured prior to coating, with a minimum cure time of 15 days at 75 °F. The concrete must be structurally sound and free of contaminants, including but not limited to waxes, loose paint, dirt, grime, oils, release agents, curing compounds, and any surface laitance (a layer of week and non-durable material). If prepared concrete is suspected to be contaminated with any of these materials, test for their presence by spraying a thin coat of water onto the concrete. If water beads on the surface, contamination is likely present and the concrete should be scrubbed with a degreaser or mild detergent, rinsed with clean water, and allowed to thoroughly dry prior to coating.

Slab must be at least 4” thick and any distinct layer at least 2” thick to be considered structurally sound. Repair and leveling layers containing latex or other components generally prevent absorption and proper bond and should be removed. Bead or shot blasting is required to achieve a surface profile of CSP 3-5. Acid etching is not permitted, nor chemical remediation of any adhesive residues.

Expansion (cold or construction) joints should be left intact. MV Epoxy Primer is not warranted against structural movement at expansion joints. To help reduce moisture emissions through expansion joints, coat the walls and bottom of the cleaned joint with MV Epoxy Primer. Once allowed to dry, an expansion joint cover or an elastomeric sealant may be used. For concrete slabs over 6 months old, sawcut/control joints and cracks should be filled by pouring MV Epoxy Primer full depth or to 3/4 of joint depth. If filling to 3/4 depth pour silica quartz into MV Epoxy Primer to create a mortar. Sweep away excess sand and proceed with MV Epoxy Primer installation.

All substrates must be properly prepared by trained or experienced contractors or maintenance. UDT and its representatives or distributors will not be responsible for coating failures due to undetected moisture vapor emissions. Consult with a UDT representative or distributor for more information.

MIXING INSTRUCTIONS

Wear chemical resistant gloves and safety glasses when mixing. Mix quantity that will be used within working time. (15 minutes. at 75 °F).
1) By volume, pour out one (1) Part A and one (1) Part B into a separate mixing container. (1:1 ratio)
2) Drill-mix on low speed for 3 minutes.
3) **DO NOT REDUCE!**
4) Immediately pour all contents onto the floor and complete spreading and rolling within 15 minutes.

APPLICATION INSTRUCTIONS

Tools needed:

- 20 mil notched squeegee
- Roller frames and threaded poles
- 3/8” nap woven rollers
- wet film gauge

Surface and air temperature must be 55°F or greater. Colder temperatures can significantly retard or advance working and cure times respectively. Measure out the area of floor intended to be covered and mark with tape to ensure coverage rates are achieved. Pour a strip of MV Epoxy Primer across the surface. Spread with the squeegee. Back roll to achieve a uniform coverage and smoother surface. Proper coverage rates must be maintained at all times. Very rough or porous concrete may require heavier application rate. Use the wet film gauge to verify the thickness of the wet material.

WARRANTY

Ultra Durable Technologies, Inc.’s products are warrantied to be of uniform quality within manufacturing tolerances. Since no control is exercised over product use, no warranty, expressed or implied, is made to the effects of such use. The seller and manufacturer’s obligations under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. Contact your distributor or representative for more information.