MIRREDTE

MiraPrime MVERS Plus

Product Technical Data Sheet

MiraPrime MVERS Plus is a fluid-applied, one-coat moisture mitigation system consisting of uniquely modified resinous epoxy and other chemical compounds. Formulated to prevent flooring failures on concrete slabs exhibiting elevated levels of moisture vapor emission, *MiraPrime MVERS Plus* meets the performance requirements of ASTM F3010-13 "Standard Practice for Two-Component Resin Based Membrane-Forming

Moisture Mitigation Systems for Use Under Resilient Floor Coverings. *MiraPrime MVERS Plus* will withstand very high moisture vapor emission rates (MVER) of 24lbs/1000SF/24hrs or in situ RH of concrete substrate up to 99.9%, and the protection provided is uninhibited from sustained exposure to pH of 14. With an exceptionally low perm rating, excellent resistance to high pH, and outstanding performance under elevated levels of moisture vapor emission, *MiraPrime MVERS Plus* is the perfect choice for most all varieties of floor coverings.

WHERE TO USE

- New and existing concrete with high moisture vapor emission.
- Concrete slabs exhibiting high pH.
- Moisture mitigation under vinyl, linoleum, carpet, rubber & wood.
- Primer for vapor impermeable resinous and epoxy flooring.
- Commercial office buildings, hospitals & schools.
- · Retail stores and supermarkets.
- Military facilities and airplane hangars.
- Manufacturing and process plants.
- Power and utility facilities.

ADVANTAGES

- Under slab vapor retarders not required.
- Low odor & zero VOC.
- Quick cure time to apply subsequent flooring.
- High compressive, flexural, and tensile strengths.
- Withstands high moisture vapor emission rates.
- Excellent resistance to 14 pH.
- Excellent adhesion to damp concrete.
- In compliance with ASTM F3010-13.
- Low permeability rate < .01 perms.
- Supplied in two convenient full kits.

THEORETICAL COVERAGE RATES**

Per ASTM F-1869

 10 lbs. or less
 145 - 155 sq. ft./gal (10 - 11 mils)

 10 - 15 lbs.
 125 - 135 sq. ft./gal (12 - 13 mils)

 15 - 24.9 lbs.
 75 - 100 sq. ft./gal (16 - 21 mils)

Per ASTM F-2170 or 2420

85% or less 145 - 155 sq. ft./gal (10 - 11 mils) 85 - 90% 125 - 135 sq. ft./gal (12 - 13 mils) 90 - 99.9% 75 - 100 sq. ft./gal (16 - 21 mils)

**Consumption rates are dependent on many factors including measured moisture vapor emission rates, substrate profile, porosity, and water cement ratio. Above rates of application represent typical values.

PACKAGING and COLORS

Kit Sizes: 2.9 Gallon, 5.5 Gallon Component A: 2-gal pail, 6-gal pail Component B: 1-gal can, 2-gal pail Available in clear only

MIX RATIO

Always mix full kits only. Do not batch.

SHELF LIFE AND STORAGE

One year from the date of manufacture when unopened and material is stored in a protected environment free from moisture, excessive heat, freezing temperatures, and direct sunlight.

TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)

Adhesion (ASTM D7234)	>480 psi
Compressive Strength (ASTM D695)	12,000 psi
Tensile Strength (ASTM D638)	5,600 psi
Tensile Elongation (ASTM D638)	2.7%
Permeability (ASTM E96)	<0.085%
Microbial Resistance (ASTM G26)	Passes Rating 1
Alkali Resistance (ASTM 1308)	Resistant
Solids Content	100%
VOC (grams/liter)	0 g/L
Drying Time	6-8 hours

OVERVIEW OF INSTALLATION STEPS

- Surface Preparation All surfaces must be clean, sound, dry and free from any bond inhibiting substances including, but not limited to, grease, oil and any other contaminants or loosely adhered materials. Mechanically prepare concrete substrates to a required surface profile of a CSP-3 achieved preferably by shot-blasting. Acid etching is unacceptable. Grinding is acceptable wherever shot blasting cannot be performed such as along edges and transitions. Do not use any type of sweeping compound containing oils or waxes that may interfere with proper adhesion.
- Mixing MiraPrime MVERS Plus epoxy resin components must be mixed mechanically using a low-speed drill (300-400 rpm) until blended with a "Jiffy-type" or similar Miracote-approved mixing paddle. Empty entire contents of component A and component B into a clean mixing vessel. Mix for approximately 3 minutes keeping the mixing head fully immersed at all times. At least once when mixing, stop to scrape down the sides and bottom of the pail to ensure thorough blending of both components. If not mixing full units, each component must be pre-mixed individually ensuring uniformity prior to use. Once completely mixed and in observance of pot life, dispense material immediately from the pail to the substrate. Never invert mixing container and dispense residual mixed resin on to the floor surface as material that "clings" to the mixing vessel wall and bottom surfaces may not be properly mixed to ratio.



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Application- Apply *MiraPrime MVERS Plus* only to substrate when surface and ambient temperature is between a minimum of 50°F (10°C) and maximum of 90°F (32.2°C). Both surface and ambient temperatures should be as equal as possible. Spread mixed material in a large ribbon across the concrete surface and distribute with a notched squeegee to appropriate coverage rate. Immediately back-roll at a 90° angle from the direction of the notched squeegee application spreading the resin evenly across the substrate. Only use with a high quality, phenolic core, industrial grade 3/8" maximum nap roller. Utilize a mil gauge to verify proper application thickness. In the event that "outgassing" occurs, immediately discontinue application, and contact a local Miracote technical representative for support.

FOR BEST RESULTS

- Always install a minimum 4' x 4' on-site mockup to verify actual coverage rates, potential for application problems, and other critical requirements prior to proceeding with the installation.
- Verify and download current versions of product technical data sheets (PTDS), material safety data sheets (MSDS), and installation guides (IG) at www.miracote.com.
- Protect materials at all times from excessive heat and cold, and pre-condition to room temperature, as necessary.
- Measure surface and ambient temperatures to ensure the material is only applied when temperatures are between 50°F (10°C) and 90°F (32.2°C) during placement and cure time.
- Regularly check wet film thickness with mil gauge and monitor consumption to ensure correct application rates are obtained.
- The proper application of this product is the sole responsibility of the end user. Job site visits by Miracote representatives are only for the purpose of making recommendations, and do not assume any liability for supervision or quality control.

LIMITATIONS

- Installed product forms a vapor barrier after cure.
- Not intended for use on exterior concrete slabs-on-grade.
- Minimum ambient/substrate temperature of 50°F (10°C).
- Concrete must be minimum age of 3 7 days, depending on curing and drying conditions.
- Maximum allowable moisture vapor transmission (MVT) of 24.9 lbs./1000 sf./per 24 hr. period per ASTM F1869 (CaCl Testing).
- Maximum allowable moisture vapor transmission (MVT) of 99.9% RH as per ASTM F2170 (RH-Relative Humidity Testing).

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICES ARE MET.

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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