



PRODUCT TECHNICAL DATA SHEET

MVB FAST (MOISTURE VAPOR BLOCK FAST)

Advanced Coating Systems

HIGH PERFORMANCE TWO-COMPONENT MOISTURE/VAPOR CONTROL EPOXY

GENERAL PRODUCT DESCRIPTION

MVB Fast is a two-component, high performance, fast curing, concrete vapor control coating system. Its epoxy chemistry prevents floor coatings and coverings from failure, which is often a result from excessive vapor transmission in the concrete. MVB Fast meets and/or surpasses the industry standard moisture mitigation in accordance with ASTM F-3010, requiring a vapor permeance rating no greater than .1 grains/h/ft²/in. MVB Fast may be applied between 10 mils (perm rating of 0.087) to 16 mils (perm rating of 0.048). 16 mils (perm rating of 0.048) will provide more effective results.

ADVANTAGES

- Self-Priming
- Fast curing
- 100% Solids, 0 V.O.C.
- Can be Applied Over 7 Day Old Concrete
- Can be Applied Over Damp Concrete
- Requires 1 Coat

PRODUCT DATA

Volumetric Ratio:	2.5 to 1
Solids:	100%
Approximate Coverage:	175 Sq Ft per gallon (16 mils)
Application Temperature:	55-90°F
Thinning:	Not Required
Pot Life:	10-18 Minutes
Working Time On Floor:	30 Minutes
Cure Time:	4 Hours
Critical Recoat Time:	16-24 Hours
Shelf Life:	12 Months

Cure time, pot life, and working time are based on a slab temperature of 70-75 F° and will change accordingly as temperature changes.

PACKAGING

MVB Fast is available in 2 different kit sizes:

Part A	Part B	
3.5 Gallon Kit	2.5 gal.	1 gal.
35 Gallon Kit	25 gal.	10 gal.

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	13,850 psi	ASTM C 579
Tensile Strength	7,100 psi	ASTM D 638
Bond to Concrete	420 psi concrete fails at this point	ASTM D 4541
Coefficient of Friction	0.6 minimum	ASTM D 2047
Flammability	Self-extinguishing	ASTM D 635
Hardness, Shore D	80	ASTM D 2240

APPLICATIONS

- Epoxy Coatings
- Cement Overlayments
- Cement Underlays
- Tile
- Carpet
- Wood
- Sheet Vinyl
- VCT
- Other Floor Coverings

COLORS

MVB Fast is available in clear.

SURFACE PREPARATION

Before the coating is applied, the concrete must be:

- Clean – Contaminants removed
- Profiled – Surface mechanically prepared
- Sound – Cracks repaired

Mechanical methods are required for preparing concrete prior to coating application. Though diamond grinding concrete to a CSP 2 – CSP 3 is an acceptable method, shotblasting is the preferred method, and strongly recommended in the presence of efflorescence.

PATCHING

Voids, cracks, and imperfections will be seen in finished coating if the concrete is not patched correctly.

MIXING

The ratio of MVB Fast is 2.5 to 1. That is, 2.5 parts of A (resin), to 1 part of B (hardener). Generally, 3.5 mixed gallons of MVP is ideal for application. Mix the following with a drill and jiffy mixer:

1. Premix the Part A for 45-60 seconds until uniform.
2. If using the 7-gallon kit, pour out 2.5 gallons into an empty 5 gallon mixing bucket.
3. Add 1 gallon of Part B and mix for 2 minutes. Scrape the sides of the bucket to insure complete mixing.
4. Immediately apply to the floor. MVB Fast in mass has a much shorter pot life. Once poured out on the floor, 8-10 minutes can generally be expected.

APPLICATION PROCESS

Apply MVB Fast between 18 mils (85 Sq Ft per gallon) to 16 mils (100 Sq Ft per gallon). 16 mils is always recommended. If applying an epoxy/polyurethane coating over the MVB Fast, do so within 24 hours to stay within the critical recoat window.

1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings), the air expands and can cause out gassing in the coating. It is safer to apply coatings in the late afternoon, especially for exterior applications. Optimum ambient temperature should be between 65-90°F and 5 degrees above the dew point during application.
2. Follow mixing instructions above.
3. Immediately after mixing, pour out the resin onto the surface in a ribbon, while walking and pouring at the same time until the bucket is empty.
4. Using a window squeegee on a pole, pull the MVB Fast over the substrate to spread evenly.
5. Using a 3/8", non-shedding phenolic (plastic) core paint roller, roll the coating forwards and backwards.
6. Lastly, back roll in the opposite direction from step 5.

PRODUCT LIMITATION

Always read ONYX PRODUCT LIMITATION GUIDELINES document prior to installation as the content below is only partial information.

Coating systems are susceptible to cracking if the concrete moves or separates below the coating. Hence, joint and crack treatment should be reviewed prior to the coating application. As a general rule, control joints (saw cuts) and random cracks should be saw cut or chased first, then filled with the appropriate patch material. Construction joints (2 slabs which meet and hence move) should be treated. After the coating has been applied and cured, saw cut through the coating over construction joints.

Information expressed in this data sheet is correct to the best of our knowledge. The technical data sheet does not constitute a warranty, expressed or implied as to the performance of this product. The use and application of this product is beyond our control. Warranty and liability therefore is limited to the replacement only for defective materials. Technical information is subjected to change without cause nor notice. Consult the ONYX website to confirm this is the most current issue date of the data sheet as information is subject to change.

CLEANUP

MVB Fast, while in an unreacted state, may be cleaned up with water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening. Lastly, a stronger solvent may be required if the resin is nearly set up.

WARRANTY

ONYX Concrete Coatings products are warranted for 1 year after date of manufacture. Please refer to the ONYX Limited Material Warranty for additional clarification. Refer to the ONYX General Product Limitation Guidelines.

SAFETY

Consult MVB Fast safety data sheet. Avoid epoxy contact with skin. Some individuals may be allergic to epoxy. Always wear protective eyewear, clothing, and gloves. Safety always comes first.

MAINTENANCE

Refer to the ONYX Maintenance and Cleaning Guidelines.