



# MVB Epoxy Primer

## Technical Data Sheet

### PRODUCT OVERVIEW

Moisture Vapor Barrier Epoxy Primer is a two component, 1 to 1 high solids epoxy coating designed to overcome excessive Moisture Vapor Emissions (MVE) from concrete slabs on grade without bubbling or losing adhesion! **It's innovative technology is unequaled as a moisture vapor barrier!** The user friendly viscosities are within the strictest South Coast Air Quality Control Management District (AQMD) standards for VOC compliance. MVB Epoxy Primer has also accomplished longer working time without sacrificing physical properties or performance of the cured film. When rapid cure is necessary for return to service, this can be accomplished via an accelerator designed for this system and give customers versatility that few can match.

MVB Epoxy Primer was formulated to be a high performance protective coating for applications of monolithic concrete flooring, even in cases where MVE is extraordinarily high. For color flake installations, it eliminates the need for a different material to broadcast the flake into. For applications which have UV exposure, a pigmented urethane based material should be used before finishing.

### **Composition**

Glycidyl ether, epichlorohydrin. See SDS for further details.

### **Colors**

The unit is available in clear and pigmented.

### TECHNICAL DATA

#### **Physical Properties**

Mix ratio (volumetric)	1:1
Solids content (volume)	95%
Solids content (weight)	97%
VOC (g/l)	47.3
Viscosity (@75d F cps)	470
Pot Life * (75d F 25% relative humidity in minutes)	90
Dry time (75d F 25% relative humidity in hours):	
Dry to Touch (tack free)	16
Light Pedestrian Traffic	28
Chemical resistance	7 days
Gel time (minutes)	167
Dew Point	No Limit
Tensile Strength (ASTM D412 in psi)	4,562
Compression Strength	17,900
Elongation (%)	3
Gloss (60 degrees)	98
Hardness (Shore A)	94
Tabor Abrasion (1,000g load, 1,000 cycles, CS17 wheel in mg loss)	35
Adhesion (concrete substrate ASTM D-451?)	425psi concrete failure
Moisture Vapor Emission (ASTM F1869)	No Limit
Permeance @ 10 mils (ASTM E96 / ASTM F3010-13)	0.09 grains

#### **Chemical & Stain Resistance (ASTM D-1308? 24 hour immersion)**

50% Sodium Hydroxide	no effect
25% Acetic Acid	no effect

25% Hydrochloric Acid	no effect
25% Nitric Acid	no effect
25% Sulfuric Acid	no effect
MEK	no effect
Mineral Spirits	no effect
Xylene	no effect
Brake Fluid	no effect
Gasoline	no effect
Hydraulic Fluid	no effect
Skydrol B-4	no effect
Hair Dye	no effect
Red Wine	no effect
Blood	no effect
Urine	no effect

## **GENERAL INFORMATION**

### **Surface Preparation**

Concrete must be cured for 28 days and free of dirt, dust, and any other deleterious materials from construction trades and curing compounds. Diamond grind is a minimum and shot blast depending on the intended use and Moisture Vapor Emission (MVE) from the slab. For more detailed parameters, refer to the MVB Epoxy Primer Application Specification.

### **Moisture Vapor Emissions**

All concrete slabs on grade are subject to MVE with the potential of causing bubbles, blistering or loss of adhesion. To avoid such problems, a calcium chloride test is recommended. We offer several primers other than Poly Primer Sealer that are able to exceed even excessive MVE, but contact technical service for advise in your circumstance.

### **Mixing Instructions**

MVB Epoxy Primer mix ratio is 1 to 1 by volume and the mix must not exceed a quantity that that can not be applied within its limits which will vary with temperature and humidity. Thoroughly mix the contents with a lower speed drill. Transfer the contents of the container into a second to ensure that any residual of both 'A' & 'B' are homogeneously mixed a total of 3 minuets.

### **Application**

Application of the MVB Epoxy Primer should immediately follow mixing. Brushing, rolling, squeegee and/or Magic Trowel are all acceptable means of application. For smaller installations, an 18" roller can be used to spread the material after pouring onto the floor, but a Magic Trowel will aid in spreading evenly before back rolling. Make sure that there are enough installers according to the size of the installation to keep a wet edge. Spike shoes should be worn so as not to step into the wet material. If recoat is necessary and the window has been exceeded, it will require sanding to insure proper inter coat adhesion with 60 to 80 grit abrasive. Please consult with one of our technicians on appropriate use in extenuating circumstances.

### **Handling**

Adequate ventilation is required unless a carbon filter mask is being used by personnel. If the material is being sprayed, a cartridge type respirator is required as well. Avoid contact with skin and wear protective gloves. **Consult the SDS prior to using.**

### **Slip and Fall Concerns**

The American Disabilities Act (ADA) requires a coefficient of friction to be a minimum of 0.6 on level surfaces and 0.8 on ramps. Aluminum oxide, silica or synthetic can be used to achieve these requirements and should be used in all cases where the finished system will be subjected to damp and

oily conditions and any other substance that has lubricity. Which non-skid material and its mesh size will depend on the substances creating the slip and how much traffic the floor will be subjected to.

**Warranty**

10 year labor and material.