Rhino Flooring™
NATURALLY TOUGH
By Rhino Linings®

RhinoCoat MB™
(Moisture Block) Data Sheet

PART NUMBER: RF200-MB-A 5 & RF200-MB-B 5

DESCRIPTION: RhinoCoat MB is an epoxy based moisture barrier. It is a fast setting, clear, two component, 100% solids hybrid epoxy for on or below grade concrete slabs. It has been specifically designed for maximum moisture vapor protection and fast cure, whilst reducing the risk of outgassing and "fish eyes" typically associated with contaminated or porous concrete. RhinoCoat MB is a primer that is compatiable for use under all RhinoCrete, RhinoSeal, RhinoShield and RhinoCoat systems.

TYPICAL USES: RhinoCoat MB can be applied to concrete slabs with a relative humidity as high as 95% RH and provides protection from high pH levels and vapour drive for both seamless resinous and resilient flooring. RhinoCoat MB is specifically formulated to reduce moisture vapor transmission levels up to 25lbs/1,000s.f./24hrs to 3lbs/1,000s.f./24hrs or less. RhinoCoat MB is an outstanding solution for long term moisture blocking, with great resistance to surface contaminants for both resinous and resilient flooring systems.

FEATURES & BENEFITS:

- Single Coat Application
- Minimal downtime- 4 hour Tack-Free Cure
- Zero VOCs - low odor
- Green Concrete Primer (min. 7 days old)
- Excellent Inter-Coat Adhesion
- Built-In Adhesion Promoter
- Low Temperature Curable (45°F)
- Suitable under Resilient flooring systems
- Moisture tolerant reducing moisture vapor levels up to 25 lbs/1000 sq.ft./24 hours to 3 lbs/1000 sq. ft./24 hours less

APPLICATION AREAS:

- Resilient Flooring Primer • Resinous Flooring Primer •Horizontal Primer • Patching Filler • Adhesion Promoter
- Moisture Mitigation System applied under all Rhino Flooring seamless flooring materials
- Concrete slabs- on or below-grade without vapor barrier or retarder
- "Green Concrete" slabs 7-days or older
- Industrial, commercial, institutional, and residential application

PACKAGING

- 5 gallon pail - Resin & 5 gallon pail - Hardener = 10 gallon kit (1:1 ratio)
- 1 gallon metal pail - Resin & 1 gallon pail - Hardener = 2 gallon kit
- 50 gallon drum = 100 gallon kit

COVERAGE

A gallon of RhinoCoat MB will cover : 10-16 mils or 100-160 s.f. per gallon. A nominal thickness of 16 mils is required for mitigating moisture vapor emissions greater than 16lbs/1000 sq. ft./24 hours or 90% internal RH.

RECOMMENDED SLAB TESTING PRIOR TO APPLICATION

It is recommended that the owner of the facility or a certified RHINO applicator test the slab(s) with unknown history for contaminants (e.g. hydrocarbons, other organic compounds, water soluble ions, ASR, sulfurous compounds, etc.) to determine suitability for RhinoCoat MB. RHINO strongly recommends "Anhydrous Calcium Chloride" per ASTM F 1869-11to determine the MVER (moisture vapor emission rate) in lbs/24hrs•\1000 sq. ft or "In-Situ" per ASTM F 2170-11 to determine the internal relative humidity for slabs to be treated. Low permeability flooring finishes like seamless polymer coatings require MVER to be below

RHINOCOAT MB™ (continued):

3lbs/24hrs/1,000s.f. or 75% internal relative humidity (RH). Internal RH is the test method preferred by most floor covering and coating manufacturers. MVER fluctuates within slab areas, and can have significant seasonal variations. The testing must be carried out before application of the RhinoCoat MB to obtain the manufacturer's warranty. Contact RHINO for additional details and guidelines concerning pre-installation concrete testing.

SURFACE PREPARATION

Concrete substrate must be clean and sound, with a properly abraded surface. Do not apply to surfaces that have been previously treated with any kind of penetrating sealer. Remove existing floor coverings, coatings, adhesives, curing compounds, efflorescence, dust, grease, laitance, etc. down to bare concrete with steel shot blasting, scarifying or aggressive diamond grinding to ensure the concrete surface has been properly prepared. The recommended surface profile using ICRI baseline configurations is between CSP4 -5. Once the prep work has been completed, the concrete surfaces must be vacuumed, be free of all dust, dirt and debris prior to the application of RhinoCoat MB.

USAGE GUIDELINES:

- Ensure that the surface to be primed is dry and clean – free of dirt, oil and other contaminants. The surface should have a profile.
- Recommended substrate temperature is 50° – 90°F (10° – 32°C)
- Pre-mix each side prior to use.
- Mix ratio = 1 parts by volume (PBV) of resin to 1 (PBV) of hardener. Use a low speed mixer (200 to 400 RPM) for 3 minutes or hand mix with paint stick for 5 minutes. Over mixing can cause premature gelling of material. The gallon kit is pre- filled to the correct ratio.
- Only mix the amount that can be applied in 30 minutes or less and pour out immediately. Do not leave a mixed mass of material in a container as it can cure in 10 min. or less. Coverage will vary depending on the porosity and profile of the substrate. Do not dispose of cured mixed material in containers until cool.
- Apply lining material over the primer within 6 – 24 hours of primer application. Ideally, lining should be applied when primer is dry to the touch to ensure a good chemical bond between primer and lining. If longer than 24 hours surface should be lightly sanded or wiped with solvent.

POT LIFE & CURE TIME:

Pot Life: 10 minutes @ 70ºF for a 1 quart kit; can be extended by adding 5% acetone

Tack Free Time: 90 – 120 minutes @ 60ºF (16ºC)

60 – 90 minutes @ 90ºF (32ºC)

STORAGE & SHELF LIFE: Hardener: Twelve months, unopened; stored properly. Resin: Twelve months, unopened, stored properly. Store in sealed containers at 70 – 90º F (21° – 32°C)

OTHER USES:

- Patch Filler Compound - RhinoCoat MB can be used as a patch and filler by adding 4 parts by volume dry sand to 1 part by volume mixed.

SAFETY PRECAUTIONS: Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS)

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product SDS and Safety Manual for detailed information and handling guidelines.

For Your Protection: The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. Because of numerous factors affecting results, Rhino Linings Corporation makes no warranty of any kind, express or implied, other than that the material conforms to its applicable current Standard Specifications. Rhino Linings Corporation hereby disclaims any and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of Rhino Linings Corporation for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.

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