Armor Epoxy MB100 Primer System

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PRODUCT DESCRIPTION

The Armor Epoxy MB100 is a high performance epoxy primer system designed to reduce water vapor transmission through concrete floors. It is also designed to offer superior adhesion and bonding, making it a superior bonding coat for many coating systems.

BENEFITS/FEATURES

- Superior adhesion for concrete affected by moisture vapor transmission.
- Offers excellent long term wear resistance.
- Excellent base coat for many epoxies and urethanes
- Reduces moisture vapor transmission through concrete floors.
- Easy to apply and maintain.

SUGGESTED APPLICATIONS

- The Armor MB100 is designed strictly as a base/primer coat.
- Concrete Floors
- Garage Floors
- Aircraft Hangers
- Warehouse Floors

TECHNICAL INFORMATION

VOC ……..0 g/l
Application temperature…..…….....55-80 degrees F
Dry Time-Set to Touch…….....4-10 hours
Dry Time-Foot Traffic.....12-24 hours
Dry Time-Wheel Traffic.....48 hours
Recoat Window….....8-24 hours

Active Solids…….....100%
Pot Life.....Not Applicable
Concrete Adhesion……..Excellent
Perm Rating……<0.1 Perms @ 16 MILS

SPECIFICATIONS/COMPLIANCES

- Meets OTC, CARB, and LADCO VOC Restrictions
- Perm Rating: <0.1 perms at 16 mils
- ASTM E 96-10 (standard test method for water vapor transmission of materials)
- ASTM D 7234-05 (standard test method for pull-off adhesion strength of coatings on concrete)

COVERAGE

Coverage: 250-400 ft2/3 gallon kit in one coat.

Coverage rates will vary depending upon surface porosity and texture, and application method. Excessive build up should be avoided.

SHELF LIFE

When properly sealed and stored, the shelf life of the Armor Epoxy MB100 is up to 1 year.

PACKAGING

The Armor Epoxy MB100 is available in 3 gallon kits.

APPLICATION INSTRUCTIONS

MOISTURE TESTING: Concrete floors, especially those not poured over a proper vapor barrier (plastic), are subject to possible moisture vapor transmission which may result in bubbling and/or failure of high-performance coatings. Basic moisture testing can be performed by placing a 4' x 4' sheet of plastic on the concrete surface and securely taping it down on all edges. If after 24 hours the concrete is still dry below the plastic, the surface should be ready to coat. If moisture is present, the coating applicator should perform calcium chloride and relative humidity probe testing to determine if excessive levels of vapor emissions are present before applying any coatings. Moisture should be no more than 5lbs per 1,000ft².

SURFACE PREPARATION: The concrete surface must be deemed mechanically and structurally sound, thoroughly clean of debris and completely dry. Concrete must be fully cured for a minimum of 28 days. It is recommended to prepare the concrete surface by mechanical means such as shot blasting or diamond grinding with 30 grit or coarser diamonds to achieve a CSP-2 to CSP-3 profile. Vacuum the concrete surface several times until dust thoroughly removed. If applying over an existing, fully bonded coating that is outside its recommended recoat window, the surface should be sanded thoroughly with a 60-grit screen sanding pad until the surface is completely dulled with scratches. Vacuum dust thoroughly, rinse with clean water and remove excess water with a wet/dry vacuum or floor scrubber. Allow surface to dry completely prior to application of coating. Where applicable and with adequate ventilation, wipe the surface with acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! If using acetone follow all safety precautions, make sure no pilot lights, open flames, sources of static electricity, sparks or extreme heat sources are present. Use recommended personal protection for acetone.

Substrate, air and material temperatures must be no less than 55°F and not exceed 80°F. If applied outside these limits the coating may not achieve adequate film formation and may have excessive air entrapment, bubbles, blushing or hazing. Please note that higher substrate, air and material temperatures as well as excessive humidity may speed up the cure rate of this product. Cooler temperatures and lower humidity may slow the cure rate of this product.

FOR PERSONAL PROTECTION USE GLOVES, GOGGLES, RESPIRATOR AND OTHER NECESSARY PPE. REFER TO SDS PRIOR TO USE!

TINTING: Tinting this material is not recommended as it may hinder it's ability to fully penetrate and achieve maximum bond.

MIXING: If mixing less than a full kit, mix Part A and Part B separately with a stir stick, low speed mixer or vigorously shake containers prior to measuring out the smaller kit to ensure uniform distribution of all ingredients. In a clean mixing container, blend 2 Parts A and 1 Part B using a drill mixer for 2-3 minutes. Avoid creating a vortex in the material which could introduce air and/or moisture content to the mixture. Do not mix more than can be applied within the usable pot life time frame. DO NOT THIN!

COVERAGE RATE:
First Coat - Direct to Concrete : 250-400 ft2/3 gallon kit in one coat*
*Coverage rates may vary depending upon surface porosity, texture, application method and prior coating application. Excessive build up should be avoided.

APPLICATION: Immediately pour mixed onto the surface! It is suggested to apply the mixed material by pouring it directly out onto the surface and spread with a flat flexible squeegee, gauge rake or a notched squeegee. Use a 1/8" (8 - 12 mil) notched squeegee when applying direct to concrete. A 3/16" (15 - 20 mil) notched squeegee may be used on additional coats over a completely sealed off surface. Back roll clear and solid color epoxy using 3/8" nap shedless roller or 3/8" foam roller. 18" rollers are recommended for any surface to speed up application time and reduce roller marks. For corners and areas hard to maneuver squeegees/rollers, quickly use a brush or small roller. While applying keep a wet edge to prevent roller marks. It is recommended to work in sections usually using control joints as dividers to ensure proper application results. It is always suggested to minimize the amount of time mixed material is held in a larger volume, especially in higher temperatures as the chemical reaction may overheat the product, significantly reducing the pot life of the material. If the material becomes thick while applying and sticking to the application tools, stop applying and discard the mixed material. At this point it has reached the end of the usable pot life. While applying, keep a wet edge to prevent streaking. Do not allow the product to puddle! Use a brush to remove excess coating in joints.

RECOATING: If possible, recoat within the suggested recoat window. Apply additional coats in the same manner as the first coat. Note that higher substrate, air and material temperatures as well as excessive humidity may greatly reduce the acceptable recoat window of this product. When working in higher temperatures, always recoat as early in the recoat window as possible to avoid failure between coats. If recoating outside the suggested recoat window or beyond 24 hours, sand using a 60-100 grit sanding screen to ensure adequate adhesion between coats. Vacuum dust thoroughly, rinse with clean water and remove excess water with a wet/dry vacuum or floor scrubber. Allow surface to dry completely prior to application of coating. Where applicable and with adequate ventilation, wipe the surface with acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! If using acetone follow all safety precautions, make sure no pilot lights, open flames, sources of static electricity, sparks or extreme heat sources are present. Use recommended personal protection for acetone.

PLEASE NOTE: Applying material outside the suggested parameters may result in product failure. It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture etc. When applying, adhere to suggested coverage rates. Applying too thin of a coating may cause inadequate film formation, limited performance expectations and/or undesirable finish. Applying too thick may result in bubbling, hazing, etc. DO NOT USE ON BRICK, DO NOT USE ON EXTERIOR APPLICATIONS.

COF WARNING: OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slip-resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Foundation Armor recommends the use of slip-resistant aggregate such as the ARMOR DuraTrac or the Armor Non Slip Additive in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Foundation Armor nor its sales agents will be responsible for injury incurred in a slip and fall accident.

CLEAN-UP

Use Xylene. Dispose of containers in accordance with local and federal regulations.

PRODUCT REMOVAL

Dried, cured sealer may be removed with a commercial coating stripper, or by using a diamond grinding method, sandblasting method or similar mechanical action.

PRECAUTIONS AND LIMITATIONS

- Concrete must be fully cured for at least 28 days.
- This product will freeze during storage so must store above 40 degrees F.
- ALL HVAC ventilation ducts should be somehow blocked prior to application so solvent fumes are not distributed.
- Use proper ventilation when applying in door during application and for hours after to ensure fumes can properly escape.
- Coverage rates depend upon many conditions including application method, surface porosity, and applicator.
- Be aware that this product may be slippery when wet. Non-Slip additives are available.
- Armor Epoxy MB100 may darken the surface of many new and existing concrete substrates. Test prior to use.
- Physical properties listed on this technical data sheet are typical values, not specifications.
- Do not let sweat or other liquids come into contact with the uncured coating.
- It is not recommended to apply this product over carpet, tile, or other types of floor adhesives.
- Do not thin this product. Improper thinning may cause sealer to delaminate in a short time frame.
- Physical properties listed on this technical data sheet are typical values not specifications.
- This product is intended as a primer/base coat only.
- Calcium Chloride test should be performed prior to purchasing the coating, and should be performed on several different areas throughout the floor. Product can't be applied to concrete floors that exceed 10 lbs of moisture in a 24 hour period.
- This product is NOT intended for use over vegetable oil, animal fat or synthetic oil contaminated concrete.
- This product is NOT intended for use over concrete contaminated with motor oil or other automotive fluids.
- Relative humidity should not exceed 50% during the time of application or curing.
- Product can take up to 10 days to fully cure. Vehicles and other equipment should not be placed on the coating during this time period.
- If applying over an existing coating, proper adhesion and compatibility tests are essential. In this application the substrate preparation, application, performance and all other liabilities are strictly the end users responsibility. Foundation Armor also offers no guaranty, warranty or other claims to the success or results of a job or project.
- Applying Armor Epoxy MB100 outside the suggested parameters may result in product failure. It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture etc. Applying too thin of a coating may cause inadequate film formation or performance expectations may be limited. DO NOT USE ON BRICK.
- ALWAYS read current SDS and Technical Data Sheet (TDS) posted on FoundationArmor.com prior to use and prior to determining project suitability.
- Information contained in this TDS is based on lab temperatures of 70° - 72°F at 50% RH. Using this product outside these conditions may affect the accuracy of the information contained in this document.
- Foundation Armor offers no guarantee, warranty or other claims to the success or results of a job or project.
- A chemical exposure test should always be performed prior to application to ensure satisfactory resistance to specific chemicals.
- Appropriate personal protective equipment is necessary to prevent injury. This may include, but is not limited to, gloves, goggles, respirator, etc. Refer to the Safety Data Sheet prior to use.
- The applicator is responsible for suitability of application, and the results of the application. We suggest applying to a test area first to verify compatibility, absorption, coverage rate, and project suitability. Applicator is also responsible for ensuring product meets local VOC regulations, and any and all other regulations that may apply.
- In all cases, refer to the Safety Data Sheet prior to application for complete health and safety information. Do not swallow, avoid direct contact with skin, avoid inhalation, keep out of reach of children and pets.