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# Product Information

# BOSTIK EMC™

# **Epoxy Moisture Coating**



### PRODUCT DESCRIPTION

Bostik EMC is a high performance, rapid drying, water-based, penetrating epoxy formulated to dramatically reduce moisture vapor transmission and surface alkalinity from substrates including; "freshly-poured/green concrete," properly prepared concrete, cement backer board, radiant heat flooring, and cement based terrazzo prior to the installation of engineered or solid hardwood; carpet; vinyl/VCT; rubber; porcelain, marble, granite or ceramic tile floor covering. Bostik EMC is a low odor, non-flammable, two-component system.

Bostik EMC contains Bostik's Blockade™ antimicrobial protection and utilizes a breakthrough, silver-based, antimicrobial agent that provides built in protection to inhibit the growth of a broad range of odor causing bacteria, mold and mildew on the surface of the coating's film. Bostik EMC is uniquely formulated so that it may be applied to fresh "green" concrete as soon as it has achieved "initial set" (when the concrete can be walked on without disturbing the surface). It is pigmented tan for visual indication of coverage and film thickness during the application process. It is extremely durable and wear resistant.

When properly installed, Bostik EMC is designed to reduce the moisture vapor emission rate of concrete slabs to 3 lbs. per 1,000 ft<sup>2</sup> per 24 hours. This non-blushing formulation requires no solvent wiping, and has no application window in which floor covering adhesives must be applied to achieve a strong bond. Bostik EMC is formulated to be effective in reducing the surface alkalinity of concrete slabs with pH levels as high as 14 down to pH levels of 9 or lower.

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Application Temperature		40°F to 90°F	
Flash Point		>200°F	
	Viscosity		
	Part A	18,000 cps	
	Part B	2,200 cps	
	Mixed	4,300 cps	

Maximum allowable moisture

vapor emission rate:  $1 \cot \le 14 \operatorname{lbs/1,000 ft^2} 24 \operatorname{hrs}$ 

 $2 \text{ coats} > 14 \text{ lbs} \le 25 \text{ lbs/}$ 1000 ft<sup>2</sup>/24 hrs (ASTM 1869)

as per (ASTM 1869)

Odor Mild

Color

Part A White Part B Tan Mixed Tan

Weight I 1.65 lbs/gallon
Pot Life @ 72°F 60 minutes
Cure Time\* 6 hours
VOC Content 67 g/L

Please refer to and follow industry standards for flooring material being installed (ie.: NWFA, NOFMA, MMFA, TCA, NTCA, CRI, etc.) prior to using this material. Various flooring materials have vastly different substrate preparation and installation requirements; substrate preparation and installation requirements are key to a successful installation regardless of flooring material being installed.

<sup>\*</sup>Cure time may vary due to temperature and humidity.

## **DIRECTIONS FOR USE**

Read and understand data sheet and Material Safety Data Sheet completely before beginning installation. Follow industry standards and flooring manufacturer's recommendations for design, layout and application of flooring materials; including test methods, jobsite temperature and relative humidity. Always do a test area to ensure product satisfaction, including adhesion to substrate, and/or to become familiar with proper application techniques prior to use.

Moisture Vapor Emission Testing: Prior to the application of Bostik EMC, a Moisture Vapor Emission Rate, using "Anhydrous Calcium Chloride" testing per ASTM F 1869-05, must be obtained to determine the Moisture Vapor Emission Rate.

FOR APPLICATIONS OVER "FRESHLY-POURED/ GREEN CONCRETE": Bostik EMC is uniquely formulated so that it may be applied as soon as the fresh concrete can be walked on without disturbing the surface ("initial set"). Since a calcium chloride test cannot be done prior to application, the "Anhydrous Calcium Chloride" test, per ASTM F 1869-05, should be done prior to application of flooring material to confirm the moisture vapor emission rate is within flooring manufacturer's acceptable rate. This can be done approximately 16 hours after application of Bostik EMC at 70°F (once it is tack free to the touch). Dry time will vary depending on the temperature of the concrete slab.

#### SURFACE PREPARATION

Surfaces must be absorptive, clean, free from loose materials, oil, grease, sealers, curing compounds, waxes, silicates, laitance, and all other surface contaminants that may inhibit proper bond. Completely remove cutback adhesive residue or other surface contaminants by sandblasting, shot blasting or scarifying. All surfaces to be treated must have a concrete surface profile of CSP 2-3 (similar to light broom finish), as defined by ICRI (International Concrete Repair Institute, Guideline No. 03732).

Surface areas requiring patching or leveling must be treated using Bostik UltraFinish<sup>™</sup>, Fast Patch 102<sup>™</sup>, SL-150<sup>™</sup> Self-Leveling Underlayment with Bostik Universal Primer<sup>™</sup> ON TOP OF the properly cured Bostik EMC coating according to label instructions.

#### MIXING

Using a slow speed drill (< 150 RPM), fitted with a blade that is at least 3" in diameter, separately pre-mix Part A (RESIN) and then separately pre-mix Part B (HARDENER). Because some of the ingredients may settle to the bottom of each container, it is very important to scrape all of the material off of the sides and bottom of each pail to ensure that a proper mix is obtained. After each container has been thoroughly scraped and mixed, slowly add Part A into Part B while mixing, mix for one minute until a homogenous mix (uniform color/no streaks) is obtained. Do not over mix, as the pot life will be reduced. Mix full units only; do not mix partial components, or alter components in any way. Material components should be a minimum of 60°F (15°C) at time of mixing.

#### INSTALLATION

Make sure the concrete substrate and ambient room temperature is between 40°F and 90°F (4°C to 32°C) during and for a minimum of 24 hours after application. To achieve proper coverage, protection, and application of material, layout jobsite into 150 ft "grids". Ensure the material is applied at the required coverage rate by staying within the grid per unit/container. Use a short 3/8" nap roller to coat the substrate with Bostik EMC. Let the coating cure a minimum of 6 hours (until it is tack free to the touch), this may vary due to temperature and humidity. A nylon bristle deck brush can be used to work the coating into any pin holes or surface imperfections that may not be properly filled using the nap roller. For required application rates, please refer to the COVERAGE section. Surface of Bostik EMC should be tack-free prior to application of a second coat of Bostik EMC (if required), floor covering adhesives, primers or patch/underlayments. Cementitious patch/underlayment products, such as Bostik UltraFinish™, Fast Patch 102™, SL-150™ Self Leveling Underlayment with Bostik Universal Primer<sup>™</sup>, must be installed ON TOP OF properly cured Bostik EMC according to label instructions. Always coat the dry surface of Bostik EMC with Bostik Universal Primer prior to the installation of Bostik SL-I 50 Self Leveling Underlayment.

CRACK/JOINT TREATMENT—FOR "NON-DYNAMIC" CRACKS/JOINTS (CRACKS WITH NO MOVEMENT): Remove any existing sealant or debris. Treat all non-dynamic joints with Bostik EMC by applying a layer into the joint with a paint brush to completely coat the walls of the cavity. Once dry, fill the crack/joint with an approved cement-based patch material (ie: Bostik Fast Patch 102™).

FOR "DYNAMIC" JOINTS/CRACKS (JOINTS WITH MOVEMENT): Remove any existing sealant or debris. Treat all dynamic joints (i.e. expansion, isolation, control) with Bostik EMC by applying a layer into the joint with a paint brush to completely coat the walls of the cavity. Once dry, fill the joint with sand or backer rod while leaving the top 1/8" to 1/4" of joint for proper treatment with Bostik Chem-Calk® 900 Urethane sealant.

**CAUTION:** There is a major difference between the proper application of flooring over non-dynamic vs. dynamic joints, as well as, variations based upon the type of flooring being installed. Please follow appropriate industry standards, as well as flooring manufacturer's recommendation for treatment of joints.

#### CLEAN UP

Immediately clean all tools and equipment with soap and water. Once cured this material can only be mechanically removed; which may damage some surfaces.

#### **CURE TIME**

Light foot traffic and installation of flooring material may typically begin after 6 hours of cure time (once the surface is tack free to the touch.) DO NOT INSTALL OVER BOSTIK EMC IF IT IS STILL TACKY.

#### COVERAGE

For Applications Over "Freshly-Poured/Green Concrete" Or Installations With Substrate Moisture Vapor Emission Rate Of 14 LBS. Per 1,000 FT² Per 24 Hours: Required coverage is 150 ft² per gallon which yields a dry film thickness of  $\sim$ 6.4 mils.

FOR APPLICATIONS WITH Substrate Moisture Vapor Emission Rate Of > 14 LBS. to 25 TO LBS. Per 1,000 FT $^2$  Per 24 Hours: Two coats of Bostik EMC are required; required coverage for each coat is 150 ft $^2$  per gallon. The second coat must be applied over a fully cured/dried initial coat (typically 6 hours after application of the coating) which will yield a dry film thickness of  $\sim$  12.8 mils.

Coverage rates are approximate and actual coverage will vary based upon porosity and roughness of substrate, application technique, waste and/or other jobsite conditions.

# STORAGE SHELF LIFE

Shelf life is two years from date of manufacturing in unopened original packaging. Store at temperatures between 60°F and 90°F. DO NOT ALLOW MATERIAL TO FRFF7F.

#### **PACKAGING**

Each kit contains 24 FL. OZ. of Part A Resin and 104 FL. OZ. of Part B Hardener. For the name of a distributor nearest you, contact Customer Service at 1-800-7/BOSTIK.

## WARRANTY

Bostik EMC is warranted for one year from date of installation when applied according to directions.

To obtain the Bostik Hardwood EMC Moisture Warranty for adhesion, moisture reduction and alkalinity control, Bostik EMC must be applied according to directions, used only with Bostik brand adhesives and patch/underlayments, and the Warranty Registration Form (included in every kit) must be completely filled out and registered with Bostik, Inc. within 30 days of the installation.



PLANT LOCATIONS Temecula, CA 92590

Conyers, GA 30207







LIMITED WARRANTY

www.bostik-us.com

LIMILED WARRANTY
Bostik, Inc. warrants that the product conforms with Bostik's written specifications and is free from manufacturing defects A PURCHASER'S SOLE REMEDY FOR NONCOMPLIANCE WITH THIS WARRANTY SHALL BE THE REPLACEMENT OF THE PRODUCT OR REFUND OF THE PURCHASE PRICE. Purchasers may address their warranty claims to Bostik, Inc., 21 I Boston St., Middleton, MA 01949, Attn: Customer Service or call Bostik at 1-800-7/BOSTIK. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

