

PRODUCT DATA SHEET

Sika® MB

SOLVENT FREE, EPOXY MOISTURE BARRIER

PRODUCT DESCRIPTION

Sika® MB is a 2-component, solvent free, low viscosity, epoxy for use under wood flooring products, self leveling underlayments, floating floors and other flooring systems that require protection from subfloor moisture.

USES

- Moisture barrier to help control moisture propagation in cementitious substrates with a moisture content not exceeding 6 % by Tramex Method, residual moisture up to 100 % R.H. or 25 lb/1,000 ft²/24 h (11.4 kg/92.9m²/24 h)
- For substrate consolidation on concrete, cement and gypsum screeds
- Adhesion promoter for old and new adhesive residues in conjunction with other Sika® products
- Suitable on concrete, cement, self-leveling and gypsum substrates, OSB, plywood, quarry and terrazzo tiles, water-soluble adhesive and cutbacks

CHARACTERISTICS / ADVANTAGES

- Solvent-free (100 % solids)
- Easy roller applied application, low viscosity
- Convenient, easy to mix packaging
- Shorter construction periods
- Excellent penetration and stabilization of the substrate
- Reduction of adhesive consumption
- Suitable for use on floors with radiant heating
- Compatible with SikaBond® wood flooring adhesives, Sika® Level products
- Can be used below floating floors

APPROVALS / STANDARDS

- Meets ASTM F 3010

PRODUCT INFORMATION

| | |
|---------------------------|---|
| Chemical Base | Two component epoxy |
| Packaging | 2.64 gal (10 L) pail |
| Color | Blue |
| Shelf Life | 24 months from date of production if stored properly in undamaged sealed containers |
| Storage Conditions | Store dry at 50–77 °F (10–25 °C). Protect from moisture. |
| Density | 69 lb/ft ³ (1.1 kg/l) |

TECHNICAL INFORMATION

| | | | |
|-----------------------------|------------------------------------|---------------------|----------------------------|
| Shore D Hardness | 7 days | 83 (mixed A&B) | (ASTM D-2240) |
| Compressive Strength | 7 days | 10,000 psi (69 MPa) | 73 °F (23 °C) 50 % R.H. |
| Permeability to Water Vapor | 0.06 g/m ² -24hour-mmHG | | (ASTM E-96) |
| Service Temperature | -40–158 °F (-40–70 °C) | | |

APPLICATION INFORMATION

| Coverage | Coverage per pail |
|---|---|
| Moisture barrier | 250–300 ft ² (23.2–27.9 m ²) |
| Adhesion promoter or surface consolidator | 400–450 ft ² (37.2–41.8 m ²) |

(Coverage figures do not include allowance for surface profile and porosity or material waste).

| Application | Recommended Coatings | Results in |
|--|----------------------|--------------------|
| Moisture barrier only | min. 1 | Mirror like finish |
| Substrate consolidation only | min. 1 | Good penetration |
| Adhesion promotion only | min. 1 | Mirror like finish |
| Moisture barrier + substrate consolidation | min. 2 | Mirror like finish |
| Moisture barrier + adhesion promotion | min. 2 | Mirror like finish |

MUST produce a monolithic, pinhole-free finish with a continuous film. The need for multiple coats is directly related to surface absorption.

| Pot Life | 50 °F (10 °C) | ~ 60 minutes |
|----------|---------------|--------------|
| | 68 °F (20 °C) | ~ 30 minutes |
| | 86 °F (30 °C) | ~ 15 minutes |

| Cure Time | 50 °F (10 °C) | 18 hours |
|-----------|---------------|----------|
| | 73 °F (23 °C) | 8 hours |
| | 86 °F (30 °C) | 6 hours |

* Minimum curing time, prior to walking on primer/or for applying SikaBond® or Sika® Level.

| Application Time | Overcoating Application Time Window* | Minimum | Maximum |
|------------------|--------------------------------------|---------|----------|
| | Sika® MB (2nd coat) | 8 hours | 36 hours |

* When Sika® MB is left on the substrate for more than the maximum allowable open time, the surface must be mechanically prepared (i.e. sanded) solvent wiped before proceeding.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

- Substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust, and loose or friable particles. Paint, laitance, and other poorly adhering contents must be mechanically removed.
- Substrate must have an open textured surface to allow Sika® MB to penetrate. (i.e. Blast cleaning, grinding are considered acceptable means to achieve the desired surface profile. Acid and chemical etching are not acceptable).
- At least 50 % of the surface area must be cleared of residual adhesive and cutbacks. (i.e. by grinding or mechanical substrate preparation)
- Old cutback can contain asbestos which is dangerous for the health so do not grind, sand or blast. Refer to the Resilient Floor Covering Institute's publication "recommended work practice for removal of resilient floor coverings" for instruction.
- Minimum substrate compressive strength > 1,160 psi. Tensile Bond strength > 116 psi at the time Sika® MB is applied.
- Repair with Sika® Level SkimCoat or SikaQuick® mortar before priming.
- The floor must be cleaned with an industrial vacuum prior to installation of the Sika® MB.
- On fiber reinforced concrete, fibers should be flamed off the surface prior to application of Sika® MB as a moisture barrier.
- Before overall installation begins, Sika® recommends the application of several small test patches to determine primer application requirements and acceptability of final product performance.

MIXING

- Add one full can of component A to one full can of component B then mix with an electric drill and mixing (Jiffy Mixer type) paddle at a low speed to reduce air entrainment (300–400 rpm). Using a paint stick or similar is not sufficient to mix the primer.
- A minimum mixing time of 3 minutes shall be observed; mixing shall continue until a homogeneous mix has been achieved.
- Scrape sides of pail with paint stick or paddle to ensure all contents are thoroughly mixed together.
- Unmixed material applied to the floor will not cure properly.

APPLICATION METHOD / TOOLS

- Apply Sika® MB uniformly (in 2 directions 90°) to the substrate using a medium nap roller, ensuring that a continuous coat is achieved over the entire surface (MUST produce a mirror like finish).
- Pour contents of pail onto the floor for best working time. Attempting to work from the pail will reduce working time.
- When used as a moisture barrier and substrate

consolidation / adhesion promotor, prepare the substrate mechanically as in accordance with the guidelines stated in subtitle "Surface Preparation". Apply the first coat at 10 mils Apply the second coat at 15 mils in accordance with the open time*.

2 coats application: Apply the first coat at 75–115 ft²/gal Apply the second coat at 150–225 ft²/gal in accordance with the application time window*. Then follow one of the option:

- **Option 1:** Broadcast to refusal with oven dried silica sand (20/30) on the second coat immediately. Sweep sand once the epoxy is cured. Apply Sika® Level products on cured epoxy.
- **Option 2:** Apply Sika® Level-02 EZ Primer in accordance with the application time window*. When the primer is dry, apply Sika® Level products.

*ref. to application time in sections above

CLEANING OF TOOLS

- Clean all tools and application equipment with cleaning solvent (Xylene, MEK are effective).
- Hardened/cured material can only be removed mechanically.

LIMITATIONS

- Proper coverage must be used to achieve moisture barrier properties.
- Will not act as a moisture barrier for gypsum screeds. Gypsum based subfloors are very susceptible to excess moisture and will be degraded if exposed to excess moisture from below or above.
- Only protects from moisture coming from below the concrete.
- Will not prevent hydrostatic pressure.
- Must not be applied to a visibly wet substrate.
- Does not prevent moisture occurring between the epoxy and the floating floor due to secondary sources of moisture or acclimation, e.g. water condensation.
- Is not suitable for use with bonded systems due to possible curing and adhesion problems.
- Sika® recommends the use of Sika® Level products on top of it.
- Floor covering manufacturer's and Wood flooring manufacturer's recommendations, like room humidity levels and wood acclimation requirements should be strictly followed.
- Sika® does not make any standing recommendations as to the structural integrity of old adhesive residues or subflooring materials that are not manufactured by Sika®.
- When left on the substrate for more than the maximum allowable open time of 36 hours, prior to placing the adhesive, the surface must be thoroughly cleaned and mechanically prepared (i.e. screened sand) and solvent wiped. Failure to do this, may result in adhesion problems. For detailed instruction contact our Technical Service. When used in conjunction with

SikaBond®, Sika® MB does not need to be broadcasted with sand.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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