

PRODUCT DATA SHEET

Sika® MB Redline

Solvent Free, Fast Epoxy Moisture Barrier

PRODUCT DESCRIPTION

Sika® MB Redline is a 2-component, rapid curing, solvent free, low viscosity, epoxy moisture control system for use with all 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/1000 ft²/24 h (11.4 kg/92.9 m²/24 h)
- For substrate consolidation on concrete, cement and gypsum screeds
- Adhesion promoter for old and new adhesive residues in conjunction with other Sika® products

CHARACTERISTICS / ADVANTAGES

- Cures in 3 hours for fast turnaround jobs
- Can be used with carpet, resilient flooring, wood flooring, floating floors and all types of floor that require subfloor moisture protection
- 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 and Sika® Levels.

APPROVALS / STANDARDS

- Meets ASTM F 3010

PRODUCT INFORMATION

Chemical Base	Two component epoxy
Packaging	2 gal (7.6 L) pail
Color	Red tint
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	66 lb/ft ³ (1.05 kg/l)

TECHNICAL INFORMATION

Permeability to Water Vapor	0.06 g/m ² - 24hour-mmHG	(ASTM E-96)
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APPLICATION INFORMATION

Coverage

	Coverage per pail
Moisture barrier	200–250 ft ² (18.5– 23.2 m ²)
Adhesion promoter or Surface consolidator	300–350 ft ² (27.9–32.5 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.

Ambient Air Temperature	50°-86 °F (10°-30 °C)
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Substrate Temperature	50°-86 °F (10°-30 °C) Must be minimum 5 °F (3 °C) above the measured dew point temperature.
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Pot Life	60 °F (10 °C)	~ 16 minutes
	73 °F (20 °C)	~ 12 minutes
Working time temperature: 50°-80 °F (10°-26.7 °C)		

Cure Time	60 °F (10 °C)	3.5 hours
	73 °F (23 °C)	3 hours

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

Application Time	Overcoating Application Time Window*	Minimum	Maximum
	SikaBond® Wood Flooring Adhesive	3 hours	16 hours
	Sika® Level-02 EZ Primer + Sika® Level cementitious product	3 hours	48 hours
	Sika® MB Redline (2nd coat)	3 hours	24 hours

* When Sika® MB Redline 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 Redline 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 Redline 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 Redline.
- On fiber reinforced concrete, fibers should be flamed off the surface prior to application of Sika® MB Redline 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 product.
- 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 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).

CAUTION: The unit can conduct to a rapid reaction that can generate high temperatures and produce steam. In order to avoid any risks, the entire content of the bucket have to be poured on the substrate immediately after mixing. If any reaction start in the bucket, do not touch the bucket and carry carefully the bucket by the handle outside until it cool down.

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

- Sika® MB Redline must not be applied to a visibly wet substrate.
- Only protects from moisture coming from below the concrete. Does not prevent moisture occurring between the Sika® MB Redline and the floating floor due to secondary sources of moisture or acclimation, e.g. water condensation.
- Will not prevent hydrostatic pressure.
- Gypsum based subfloors are very susceptible to excess moisture and will be degraded if exposed to excess moisture from below or above. Sika® MB Redline will not prevent damage to gypsum based subfloors that are exposed to excess moisture levels and then will not act as a moisture barrier.
- Sika® recommends the use Sika® Level products for best results. Consult level/ patch system manufacturer regarding priming and other application/limitation guidelines prior to the placement of materials.
- Floor covering manufacturer's and wood flooring manufacturer's recommendations, like room humidity levels and wood acclimation requirements should be strictly followed.
- When used in conjunction with SikaBond® Wood Floor Adhesives and floating floors, Sika® MB Redline does not need an additional primer or to be broadcasted with sand.
- 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®.

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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