

# CIKOpoxy BM



## Epoxy Resin Based Benching Mortar

### Description

CIKOpoxy BM is a three-component solvent free epoxy resin based benching mortar on concrete and other suitable substrates for thick bed applications.

CIKOpoxy BM is based on liquid epoxy cured with a special grade of hardener. It offers a tough seamless surface that can be built to higher thickness.

### Properties

- Three components, epoxy based benching mortar system.
- Exhibits good wear and abrasion resistance.
- Easy to clean and maintain hygienic surface.
- Resistance to wide range of aggressive chemicals including sewage and soil chemicals.
- Can withstand dynamic and static loads.

### Application Areas

CIKOpoxy BM is suitable for both in industrial and commercial segments such as,

- Sewage manholes and tanks.
- Sewage treatment plants.
- Dairies and chemical plants.
- Engineering workshops.
- Marine structures.
- Chemical and non-potable water storage tanks.

### Physical properties

Form	3 component system Part-A & B: Liquid Part-C: Solid
Colour	Grey
Mixing ratio	Pre-weighed packs
Pot life @ 25 °C	30 minutes
Final cure @ 25 °C	7 days
Allowable foot traffic	After 24 hours
Compressive Strength ASTM D-695 @ 7 days	>75 N/mm <sup>2</sup>
Flexural Strength ASTM C348 @ 7 days	>25 N/mm <sup>2</sup>

Bond Strength ASTM D7234 @ 7 days	>2.5 N/mm <sup>2</sup> Failure in concrete
Abrasion Resistance ASTM D4060 (CS10, 1000 cycles, 1kg)	< 50mg

### Chemical resistance

CIKOpoxy BM is resistant to a wide range of chemicals. Resistance to occasional spillages include when tested as per ASTM D543. Specific data is available on request

### Coverage

CIKOpoxy BM will provide coverage of 2.5 m<sup>2</sup> per pack of 25 kg @ 5mm thick.

In general, the coverage depends on the substrate condition and finish. Consult CIKO technical service department for further guidance.

### Application instructions

#### Surface preparation

*New concrete substrate:*

The new concrete substrate should complete the process of curing and should have a dry surface. The surface should be prepared using mechanical scrubbers to remove loose and un-bonded particles. Surface diamond disk grinding or shot blasting shall be done to totally remove any type surface film forming materials.

*Old concrete substrate:*

All contamination such as oil / chemical spillage or pot holes should be treated. The surface should be prepared using mechanical grinding or by scrubbing to remove loose and un-bonded particles.

#### Priming

The base [Part-A] and hardener [Part-B] components of CIKOpoxy Prim11/14 should be mixed thoroughly using a heavy-duty slow speed drill-paddle assembly for three to five minutes and ensure a homogenous mix. Application of primer should be carried out as per the respective technical data sheet. Properly mixed primer should be applied using brush or roller and allow becoming tacky for the application of benching mortar.

### Application of benching mortar

The base [Part-A] and hardener [Part-B] components of CIKOpoxymortar should be mixed thoroughly using a heavy-duty slow speed drill-paddle assembly for two minutes and ensure a homogenous mix. Dispense the third component [Part-C] slowly into the mix and continue mixing for another 2-3 minutes until a homogenous mix and colour is obtained.

Properly mixed material should be spread over the clean and tacky primed surface using trowel maintaining the required thickness and levelling.

Note: It can also be applied by wet-on-wet method to achieve smooth finishing, it is recommended cleaning the steel trowel surface with CIKOsol or CIKOsolvent-20.

### Precautions

Prior application of primer and CIKOpoxymortar, ensure that;

- The moisture content of the substrate is less than 4%.
- The ambient temperature is between 10 – 45°C.
- The substrate temperature is between 10 – 35°C and at least 3°C above dew point temperature
- The relative humidity is below 75%.

### Packaging

CIKOpoxymortar is available in 25 kg packs consisting of Part-A, B & C.

### Shelf life

CIKOpoxymortar has a shelf life of 12 months if stored in accordance with CIKO instructions.

### Storage

CIKOpoxymortar should be stored under enclosed shaded area at temperatures between 5 – 35°C.

### Health & safety

CIKOpoxymortar should not come in contact with eyes or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Applicator should wear appropriate clothes, gloves and goggles. Use of barrier cream is recommended to provide additional skin protection. If comes in contact with eyes, flush with plenty of fresh water and seek medical advice. Refer Material Safety Data Sheet for further details.

### Technical Support

*For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off-site services to end users, specifier and contractors.*

### More from CIKO Middle East

*A wide range of construction chemical products are manufactured by CIKO Middle East which includes:*

- Concrete admixtures and additives
- Waterproof and Damp-proof coatings
- Surface Treatments
- Walls, Flooring and Toppings
- Grouts and anchors
- Tile Adhesives and Grouts
- Concrete Repair Materials
- Adhesives and Bonding Agents
- Protective Coatings & Sealers
- Joint Sealants and Moulding compounds
- Sports Flooring
- Plastering Mortars
- Paints

### Legal Notice and Warranty

CIKO warrants this product to be free from manufacturing defects and to meet the technical properties stated in the current Technical Data Sheet, if used as directed within its shelf life. Satisfactory results depend not only on quality of product but also on many factors beyond our control. CIKO makes no other warranty or guarantee, express or implied, including warranties of merchantability or fitness for a particular purpose with respect to its product. The sole and exclusive remedy of purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the sole option of CIKO. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by purchaser. CIKO will not be responsible for any special incidental, consequential including lost profits or punitive damages of any kind. Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on CIKO's present knowledge and experience. However, CIKO assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third-party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. CIKO reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein

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All CIKO products are manufactured under a strict management system conforming to and in compliance with requirements of international standards of Quality, Environmental, occupational Health and Safety ISO 9001, ISO14001 and ISO45001.