

# CIKOPOXY VO

Smart Chemical Solutions



## Vertical and overhead epoxy resin based repair material

### Description

CIKOpoxy VO is a three component epoxy resin based repair system on concrete and other suitable substrate for thin bed repair applications.

CIKOpoxy VO is based on liquid epoxy cured with a special grade of hardener. It offers an easy workable mortar that can be applied to a thickness from 3mm up to 12mm in single placing. Higher thickness may be achieved by multiple applications.

### Properties

- Three component epoxy based repair system.
- Exhibits good wear and abrasion resistance.
- Provides seamless monolithic surface.
- Resistance to wide range of chemicals.
- Can withstand dynamic and static loads.
- Anti-sagging properties enabling it to build higher thickness of several layers.

### Application area

CIKOpoxy VO is a repair material that is suitable to use both in industrial and commercial segments such as,

- Beams and columns repair.
- Warehouse floors and food storage areas.
- Dairies and chemical plants.
- Engineering work shops.
- Marine structures.
- Chemical and water storage tanks.

### Physical properties

Form	3 component system Part-A & B : Liquid Past-C : Powder
Colour	Grey in general
Mixing ratio	Pre weighed packs
Pot life @ 25 °C	60-70 minutes
Allowable foot traffic	After 24 hours

Compressive strength ASTM C 579	>75 N/mm <sup>2</sup>
Flexural Strength	>20 N/mm <sup>2</sup>
Tensile Strength	>10 N/mm <sup>2</sup>
Bond strength	Failure in concrete

### Chemical resistance

CIKOpoxy VO is resistant to a wide range of chemicals. Specific data is available on request. Resistance to spillages include,

- Diluted acids
  - Sulphuric acid
  - Hydrochloric acid
  - Acetic acid
  - Lactic acid
- Diluted alkalis
  - Sodium hydroxide
  - Ammonia solution
- Toluene
- Petrol
- Kerosene
- Hydraulic oil
- Vegetable oils
- Used sump oil
- Sodium chloride

### Coverage

CIKOpoxy VO will provide coverage of 2.2 m<sup>2</sup> per pack of 20 kg at 5mm thick.

### 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.

Old concrete substrate:

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

### Priming

Substrate should be primed with epoxy primer. The primer should be applied so that the surface is thoroughly wet, ensuring there is a continuous film of resin over the surface. CIKOpoxxy VO should be applied whilst primer is still tacky.

### Application of repair material

The base [Part-A] and hardener component [Part-B] of CIKOpoxxy VO should be mixed thoroughly using a heavy duty slow speed drill-paddle assembly for two to three minutes and ensure a homogenous mix. Dispense the third component [Part-C] slowly into the mix and mixing should be continued for further few minutes until a homogenous mix and colour is obtained.

Properly mixed materials should be spread over the cleaned surface using trowel maintaining the required thickness and levelling.

### Precautions

- CIKOpoxxy VO should not be applied at temperatures below 10 °C.

### Packaging

CIKOpoxxy VO is available in 20 kg packs consisting of Part-A, B & C.

### Shelf life

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

### Storage

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

### Health & Safety

CIKOpoxxy VO 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
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries