

CIKOPOXY FL100

Solvent free high performance epoxy based floor coating

Description

CIKOpoxy FL100 is a solvent free two component epoxy based floor coating system recommended for concrete and other suitable substrates. It provides excellent adhesion to substrates such as concrete, wood, steel etc.

CIKOpoxy FL100 is based on liquid epoxy cured with a special grade of hardener. It offers a seamless floor coating with thickness ranging from 0.4 to 1.0mm and provides a smooth and hygienic floor.

Properties

- Two component epoxy based system.
- Easy maintenance and good resistance to most chemicals and solvents.
- Exhibits good wear and abrasion resistance.
- Hygienic with high resistance to fungal growth
- Easy to clean and maintain hygienic.
- Provides durable floor.
- Available in a wide range of light reflective colours to provide a brighter work area.

Application area

CIKOpoxy FL100 as floor coating is suitable to use both in industrial and commercial segments such as,

- Hospitals and laboratories.
- Warehouse floors and food storage areas
- Utility services elements in commercial buildings
- Car park and drive ways.
- Pharmaceutical industries.
- Light engineering workshops
- Walkways and loading bays
- Production and storage areas.

Physical properties

Form	Two component system Part-A : Liquid Part-B : Liquid
Colour	Standard colours
Solids	100%
Mixing ratio	Pre-weighed packs
Pot life @ 25 °C	40-60 minutes
Surface dry	3-4 hours
Tack free	Approx. 8 hours
Final cure	7 days
Allowable foot traffic	24 hours
Compressive strength BS6319	>85 MPa
Pull off strength ASTM D 7234	>2.5MPa (Glue failure)
Water penetration BS EN 12390	NIL
Slip resistance BS EN 14231	>105 USRV
Abrasion resistance BS EN 1341	<20mm
Shore A Hardness ASTM D2240	90-95
Shore D Hardness ASTM D2240	77-85
Tear Resistance ISO34-1 (B)	>75N/mm
Tensile Strength ASTM D412	>15 MPa
Flexural Strength ASTM C580	>40MPa
Reaction to fire BS476: Part 7	Class 1
VOC	<20g/l

Chemical Resistance

CIKOpoxyl FL100 is resistant to a wide range of chemicals when tested as per ASTM D543, Patching Method. Specific data is in below table:

Test Solution	Test Condition	Observation & Test Result
Sulphuric acid	23± 2°C	No Characteristics Observed (Resistant)
Hydrochloric Acid		
Acetic Acid		
Lactic Acid		
Sodium Hydroxide		
Ammonium Hydroxide		
Sodium Chloride		
Petrol		
Kerosene		
Hydraulic oil		
Vegetable oil		

Coverage

CIKOpoxyl FL100 will provide a theoretical coverage of 5 m² per litre at 200 microns dry film thickness.

Note: The coverage depends on the floor condition and finish. Consult our technical service department for assistance.

Application instructions

Surface preparation

The concrete surface should be free from dust and loose particles. All contamination such as oil, grease and extraneous spillages has to be cleaned using the suitable cleaning agent. Concrete shall be grinded, grit blasted or treated with equivalent and suitable mechanical means prior to the application of the primer.

Priming

Usually priming is not required, unless CIKOpoxyl FL100 is to be applied over bare concrete or on highly porous substrates.

For porous surface CIKOpoxyl Prim S or CIKOpoxyl Prim 11, a two component epoxy based primer shall be used for priming the substrate. The base [Part-A] and hardener [Part-B] components of CIKOpoxyl Prim S or CIKOpoxyl Prim 11 should be mixed thoroughly using a heavy duty, slow speed drill paddle assembly for three to five minutes and ensure a homogenous mix is obtained.

For surface subject for heavy traffic CIKOpoxyl Prim14 is recommended to improve mechanical bonding.

Application of primer should be carried out as per the respective technical data sheet. Allow the primer to dry for 12-24 hours depending on the prevailing ambient conditions.

Application of topcoats

The base component [Part-A] of CIKOpoxyl FL100 should be mixed thoroughly using a heavy duty slow speed drill-paddle assembly for two minutes and ensure that a homogenous mix with uniform colour is obtained.

Pour the hardener component [Part-B] into the mixed base component [Part-A] and mix well to homogeneity.

Properly mixed material should be applied using brush or roller over the dry and clean primed surface, maintaining the required thickness. The coated surface should be left for 12 – 24 hours curing, depending on the prevailing ambient conditions.

It is always recommended to apply CIKOpoxyl FL100 in two coats or as a single coat of higher thickness. The high-build coat should be spiked using spike rollers to release entrapped air in the material to obtain a uniform, smooth and even finish.

Precautions

Prior application of primer and coating, ensure that

- Moisture content of the substrate is less than 4%.
- Ambient temperature is between 10 – 45°C.
- Substrate temperature is between 10 – 35°C, and at least 3°C above dew point temperature.
- Relative humidity is below 75%.

Packaging

CIKOpoxyl FL100 is available in 4 and 15 litres packs consisting of Part A & B.

CIKOpoxyl Prim 14 is available in 4 and 15 litres packs consisting of Part A & B.

CIKOpoxyl Prim 11 is available in 4 and 15 litres packs consisting of Part A & B.

CIKOpoxyl Prim S is available in 15 litres packs consisting of Part A & B.

Shelf life

CIKOpoxyl FL100 has a shelf life of 12 months if stored in accordance with CIKO instructions.

Storage

CIKOpoxyl FL100 should be stored under cool enclosed shaded area at temperatures between 5 – 35°C.

Health & safety

CIKOpoxyl FL100 should not come in contact with eyes or to be swallowed. Ensure adequate ventilation and avoid inhalation of vapours.

Applicator should wear suitable cloths, gloves and goggles. Use barrier creams recommended providing 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 further 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*