

# **CIKOpoxy FL100-GF**

# Solvent Free Glass Reinforced Epoxy Based Floor Coating

## Description

CIKOpoxy FL100-GF is a two component solvent free epoxy based floor coating system reinforced with screened micronized glass flakes. It is recommended for concrete, steel and other suitable substrates providing excellent adhesion.

CIKOpoxy FL100-GF is based on liquid epoxy cured with a special grade of hardener. It offers a seamless floor coating with thickness ranging from 0.3 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.
- Forms a durable barrier to corrosive ions because of the lamellar structure of glass flakes.
- Easy to clean and maintain hygienic.
- Provides durable floor.
- Available in a wide range of light reflective colours to provide a brighter work area.
- Glass flakes dispersed through the coating prevent the ingress of water vapor and chemical solutions.
- The glass flakes provide a thermal stabilization layer in the coating and greatly reduces the risk of cracking and peeling off due to thermal shocks.
- Very low VOC (<20g/l)</li>

## Application area

CIKOpoxy FL100-GF 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	>80 MPa
Pull off strength BS-EN 1015-12	>2.5MPa (Glue failure)
Water penetration BS EN 12390	NIL
Slip resistance BS EN 14231	>105 USRV
Abrasion resistance BS EN 1341	<20mm
Shore D Hardness ASTM D2240	77-85
Tensile Strength ASTM D412	>10MPa
Flexural strength	>40MPa
Reaction to fire BS476: Part 7	Class 1



#### **Chemical resistance**

CIKOpoxy FL100-GF is resistant to a wide range of chemicals. Specific data is available on request. Resistance to occasional spillages include,

- Diluted acids
  - Sulphuric acid
  - Hydrochloric acid
  - Acetic acid
  - Lactic acid
- Diluted alkalis
- Toluene
- Petrol, Kerosene, Hydraulic oil, Vegetable oil, used sump oil, etc.

#### Coverage

CIKOpoxy FL100-GF will provide coverage of 3.3m<sup>2</sup> per litre at 300 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 should be treated well before application of CIKOpoxy FL100-GF.

#### **Priming**

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

For porous surface CIKOpoxy Prim11, a two component epoxy based primer shall be used for priming the substrate. The base [Part-A] and hardener [Part-B] components of CIKOpoxy Prim11 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 CIKOpoxy 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 CIKOpoxy FL100-GF 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 CIKOpoxy FL100-GF in two coats or as a single coat of higher thickness. The highbuild 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<sup>o</sup>C.
- Substrate temperature is between 10 35°C.
- Relative humidity is below 75%.

## **Packaging**

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

## Shelf life

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

#### Storage

CIKOpoxy FL100-GF should be stored under cool enclosed shaded area at temperatures between  $5-35^{\circ}\text{C}$ .

#### Health & safety

CIKOpoxy FL100-GF 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 damp and proof coatings
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- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants Moulding and compounds
- Ancillaries

