# **CIKOpoly IC**



## Two components Multi-Purpose elastomeric Polyurethane Membrane

## **Description**

CIKOpoly IC is a solvent free, multipurpose elastomeric two component liquid applied membrane based on polyurethane resin. When cures, it creates an impermeable membrane with excellent characteristics: elasticity, coupled with high tensile strength, as well as puncture, abrasion and chemical resistance.

CIKOpoly IC is specially designed to use as integrated system in car park deck coating for multi-story parking area.

## **Properties**

- Solvent free two component polyurethane based system.
- Provides wear and abrasion resistance.
- Flexible to bridge concrete cracks.
- Easy to clean and maintain hygienic
- Fast setting.
- Durable and economical.
- Environment friendly
- Excellent chemical resistance

## **Application area**

CIKOpoly IC is suitable to use as a waterproofing membrane as:

- Intermediate layer in car parking flooring system
- Car park deck
- Intermediate layer in docking areas bays to provide flexibility
- Floor coatings in cold stores to accommodate for temperature change and act as waterproofing membrane
- As a water proofing and protective coating membrane inside potable and drinking water tanks
- Sewage treatment plants

#### **Applicable standards**

CIKOpoly IC is under:

- ASTM C-836 and ASTM C 957
- BS 6920:2000

## Physical properties @ 25°C

Form	Two component Part-A : Liquid Part-B : Liquid
Colour	Grey
Mixing ratio	Pre-weighed packs
Solid content	100%
VOC (EPA 24)	<20 g/l
Pot life	30-35 minutes
Surface Dry	~ 6 hrs
Light foot traffic	24 hrs
Full cure	7 days
Adhesion strength ASTM D4541	>2 MPa
Tensile Strength ASTM D412	>10 MPa
Elongation at break ASTM D412	>150%
Water Vapor transmission	0.3 g/h/m <sup>2</sup>
Water penetration	NIL
Flexibility, ¼ inch mandrel at 20 °C	Passes
Shore A Hardness	85±5
Shore D Hardness	40±5

## **Chemical resistance**

CIKOpoly IC is resistant to a wide range of chemicals. Specific data is available on request. Resistance to occasional spillages include,

- Diluted acids
- Diluted alkalis
- Toluene
- Petrol
- Kerosene
- Hydraulic oil
- Vegetable oils
- Used sump oil
- Sewage
- Sodium chloride





#### Coverage

CIKOpoly IC will provide coverage of 1.0m<sup>2</sup> per litre at 1mm wet film thickness.

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

## Application instructions Surface preparation

The substrate should be free from dust and loose particles. All contamination should be treated well before application of CIKOpoly IC. In case of presence of traces of oil or grease on the substrate, it shall be removed by suitable means.

All the defected areas to be fixed with CIKO repair materials prior to the application.

#### **Priming**

The concrete surface should be primed using CIKOpoxy Prim 14 and dried. The primed area should be free from dust and loose particles.

Note: To create better mechanical key between the substrates and the membrane, sprinkle silica quartz when primer is still tacky. (Car park, deck, etc..)

#### Mixing

The base component [Part-A] of CIKOpoly IC should be mixed thoroughly using a heavy duty slow speed drill-paddle assembly for two minutes and ensure that all settled particles are dispersed and 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 for 3 to 5min to achieve a homogeneous and uniform consistency.

#### **Application method**

Properly mixed material should be applied using brush, roller, spray or trowel over the dry and clean primed surface, maintaining the required thickness. When applied at higher thickness, immediately spike the applied surface using spike rollers to release entrapped air in the material to obtain a uniform, smooth and even finish adjacent layer to be spiked at 50 % overlap. Spiking shall stop as soon as the coating starts to set.

When using as two coats system, successive coating should be applied perpendicular to the previous one.

Note: Due to sensitivity of aromatic polyurethane to UV rays, the applied coating might yellow and fade on the surface. This change in appearance does not modify its mechanical properties or leak tightness.

CIKOpoly IC can be protected by applying a top coat of aliphatic PU.

#### Cleaning

Equipment's are to be cleaned with CIKOsol immediately after usage.

Contact CIKO technical team for more giddiness and information.

#### **Precautions**

Prior application of CIKOpoly IC, ensure that

- The substrate is <4% moisture.
- The ambient temperature is between 10 40°C.
- The substrate temperature is between 10 35°C
- The relative humidity is below 75%.

## **Packaging**

CIKOpoly IC is available in 4.0 litre and 10 litre kits consisting of Part-A & B.

#### Shelf life

CIKOpoly IC has a shelf life of 12 months if, stored in accordance with CIKO instructions.

## **Storage**

CIKOpoly IC should be stored in dry and cold storage at temperature between 5 and 25°C.

## Health & safety

CIKOpoly IC 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 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

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