

# CIKOPoly SL3000

## Anti-Microbial, Three component Polyurethane based, self-smoothing screed and floor-top system

### Description

CIKOPoly SL3000 is solvent-free polyurethane self-levelling three-component screed floor system.

CIKOPoly SL3000 is based on liquid polyurethane resin cured with a special grade of hardener filled with graded fillers. It offers seamless floor having a thickness of 1 to 3 mm. It provides a smooth, hygienic floor with excellent chemical resistance, good abrasion resistance and thermal variation stability.

### Properties

- Flow-able consistency and self-smoothing properties for easy application
- Pre-weight multi component polyurethane based system
- Exhibits good wet and dry slip resistance
- Exhibits good wear and abrasion resistance
- Seamless finish; easy to clean and maintain hygienic.
- Resistance to general chemicals
- Excellent durability and impact resistance
- Low VOC

### Application area

CIKOPoly SL3000 as floor topping is suitable to use both in industrial and commercial segments such as,

- Hospitals and laboratories.
- Warehouse floors and food storage areas.
- Utility services building floors.
- Cold warehouses
- Food freezers
- Pharmaceutical industries.

- Light engineering work shops.
- Walkways and loading bays.
- Production and storage areas.
- Manufacturing plants.
- Electricity substation floors.

### Physical properties

Form	Part-A & B: Liquid Part-C & D : Powder
Colour	Available in wide range
Mixing ratio	Pre weighed packs
Pot life @ 25 °C	30-40 minutes
Foot traffic	24 hours
Final cure	7 days
Compressive Strength ASTM C579 @ 28 days	>45 Mpa
Flexural Strength ASTM C580 @ 28 days	>15 Mpa
Tensile Strength ASTM D412	>10 MPa
Bond Strength ASTM D 7234	>2 Mpa
Shore D hardness	70-75
Slip Resistance Classification (wet and dry conditions)	R10
Reduction in Microbial activity ASTM E2180-18( 24 hours)	>88%
Abrasion Resistance ASTM D4060(CS10, 1000, 1kg)	<40mg
Service Temperature	-30°C to 80°C

## Chemical resistance

CIKOpoly SL3000 is resistant to a wide range of chemicals. Specific data is available on request. Resistance to occasional spillages include:

- Diluted acids
- Diluted alkalis
- Petrol
- Kerosene
- Hydraulic oil
- Vegetable oils
- Sodium chloride

## Coverage

CIKOpoly Prim 14 will provide coverage of 9 to 10 m<sup>2</sup> per litre at 100 microns dry film thickness. 1.6 to 1.8 kg of Scratch Coat (CIKOpoly Prim 14 mixed with CIKO ASG 0.3-0.5mm) will provide coverage 1 m<sup>2</sup> at 1 mm dry film thickness.

CIKOpoly SL3000 (A+B+C) will provide coverage of 11 m<sup>2</sup> per pack of 20 kg at 1mm dry film thickness.

CIKOpoly SL3000 (A+B) will provide coverage of 35 m<sup>2</sup> per pack of 9 kg (7L) at 200 microns dry film thickness.

CIKOpoly SL3000 (A+B+D) will yield to 15 L per pack of 38kg.

Note: The coverage depends on the floor condition and finish. Consult CIKO 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 scratch coat.

### Application

#### Scratch Coat or Priming

CIKOpoly Prim14, a two component epoxy based primer shall be used for priming the substrate. The base [Part-A] and hardener [Part-B] components of CIKOpoly Prim14 should be mixed thoroughly using a heavy duty, slow speed drill paddle assembly for three to four minutes, add CIKOASG 0.3-0.5mm with a ratio of 1:7 up to 1:10 by mass to the properly mixed primer and continuously mix to achieve a homogeneous mix.

Application of scratch coat should be carried out using a trowel over the clean and dust free surface maintenance a minimum thickness of 500 microns up to 1.5 mm.

The scratch coat will treat the defected concrete areas such as pinholes, blowholes and surface imperfections. Alternatively, in case small and minor pinholes exist, it is recommended to use CIKOpoly Putty. In case of high absorption of substrate, a second scratch coat is required.

N.B: depending on site conditions and required total thickness of the system, scratch coat may be replaced by priming application of CIKOpoly Prim 14 using a roller or brush applied at thicknesses ranging from 100 to 200 microns dry film thickness

### Application of Coving Mortar

The base component [Part-A] of CIKOpoly SL3000 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. Transfer the mixed base component [Part-A] completely to a suitable container that can hold a volume of minimum 25 litres.

Pour the hardener component [Part-B] into the mixed base component [Part-A] and mix well to homogeneity. Add the powder components [Part-D] to the properly mixed [Part-A] & [Part-B] and mix well for at least 3 minutes to obtain a homogenous mass.

Properly mixed materials should have a thixotropic mortar consistency. The mortar shall be placed over the dry and clean primed corners using the suitable steel coving trowel maintaining the required shape. The applied corners must be protected without disturbance for at least 12 to 24 hours.

### Application of CIKOpoly SL 3000

Prior to the application of the self-smoothing polyurethane based screed floor topping, it is recommended to perform a groove along the perimeter of the application area particularly if there are columns or gullies in the floor surface. The width and depth of the key locking groove must be at least twice the thickness of the applied self-smoothing polyurethane screed.

The base component [Part-A] of CIKOpoly SL3000 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. Transfer the mixed base component [Part-A] completely to a suitable container that can hold a volume of minimum 20 litres.

Pour the hardener component [Part-B] into the mixed base component [Part-A] and mix well to homogeneity. Add the powder component Part-C to the properly mixed Part-A & Part-B and mix well to obtain a homogenous mass.

Properly mixed materials shall be applied over the dry and clean scratch coated surface using a notched trowel maintaining the required thickness.

Immediately and within the working time of the laid material, spike roll the applied surface in two directions using spike rollers to release entrapped air in the material to obtain a uniform, smooth and even finish.

The applied surface must be protected for 24 to 48 hours of curing, depending on the prevailing ambient conditions for all types of condensation, excessive humidity and dust deposit.

### Application of CIKOPoly SL3000 topcoat (optional)

Prior to the application of the finishing top protective coating, ensure that the applied self-smoothing screed is dry, free of dust or any other type of contamination.

The base component [Part-A] of CIKOPoly SL3000 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. Spread the properly mixed material using a brush or roller over the clean and dry screed surface maintaining a consumption rate of 0.2L/m<sup>2</sup> to achieve a dry film thickness of 200 microns.

### Precautions

Prior application of scratch coat and CIKOPoly SL3000, ensure that

- Moisture content of the substrate is less than 4% for scratch coat or and priming application.
- Ambient temperature is between 10 – 40°C.
- Substrate temperature is between 10 – 35°C and 3°C above dew point temperature.
- Relative humidity is below 75%.

### Packaging

CIKOPoxy Prim 14 is available in 4 & 15 L kits.  
CIKO ASG is available in 25 kg moisture resistant bags.

CIKOPoly SL3000 is available as below:  
Top Coating: Consisting of Part A & B: 9 kg kit (7L)

Self-Smoothing Screed: Consisting Part-A, B & C: 20 kg kit

Coving mortar: Consisting Part-A, B and D: 38 kg kit

### Shelf life

CIKOPoly SL3000 has a shelf life of 12 months if stored in accordance with CIKO instructions.

### Storage

CIKOPoly SL3000 should be stored under cold and dry enclosed shaded area at temperatures between 5 – 25°C.

### Health & safety

CIKOPoly SL3000 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. The use of barrier cream is recommended to provide additional skin protection.

If it contacts the 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.

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

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- 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