CIKOpoly TC

Smart Chemical Solutions CIKO سيكو الشرق الأوسط MIDDLE EAST

Two components elastomeric Polyurethane Top Coat

Description

CIKOpoly TC is a solvent free two component aromatic polyurethane based floor coating system recommended for extreme ambient temperature conditions. It provides excellent adhesion to substrate such as concrete, wood, steel and other substrates. CIKOpoly TC is flexible, yet tough and designed to provide an elastomeric, durable floor coating system and internal water proofing layer.

Properties

- Solvent free two component flexible polyurethane based system.
- Provides wear and abrasion resistance.
- Easy to clean and maintain hygienic.
- Fast setting.
- Durable and economical.

Application area

CIKOpoly TC suitable to use both in industrial and commercial segments such as:

- Internal and external deck coating system.
- Warehouses
- Food storage areas
- Freezers
- Utility services building floors.
- Heavy duty parking areas.
- Garage and basement
- Walkways and loading bays

Physical properties @ 25°C

Form	Two component Part-A : Liquid Part-B : Liquid
Mixing ratio	Pre-weighed packs
Solid content	100%
VOC (EPA 24)	<20 g/l
Pot life @ 25ºC	15-25 minutes
Surface Dry @ 25 ºC	~3 hrs
Tack free 25 ºC	~5 hrs
Light foot traffic	24 hrs
Full cure	7 days
Pull off Adhesion Strength ASTM D7234	>2.5N/mm^2 (concrete)
	>2.5 N/mm^2 (Epoxies & Polyurethanes)
Flexibility, ¼ inch mandrel at -20°C & 20°C	Passes
Tensile Strength ASTM D 412	>10 MPa
Elongation at break ASTM D 412	>100%
Water penetration DIN 1048	NIL
Shore D Hardness @ 7 days	60±5
Service Temperature	-25°C to 80°C

Coverage

CIKOpoly TC will provide coverage of 2.0m^2 per litre at 500micron dry 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 TC. 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 such as CIKOpoxy Putty.

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 sand when primer is still tacky. (Car park, deck, etc..)

Mixing

The base component [Part-A] of CIKOpoly TC 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.

In ambient temperature conditions, it is advisable to use Ice bath cooling during Mixing to decrease the heat generated by the reaction and extend its working time. Try to store the material 24 hours prior to the application in cool dry area at temperatures below 20^{0}C.

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.

For areas exposed to UV rays, CIKOpoly TC can be further top protected by applying CIKOCoat UV 333 at between 75 and 150 microns dry film thickness in the purpose of colour stability.

Cleaning

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

Contact CIKO technical team for more giddiness and information.

Precautions

Prior to application of CIKOpoly TC, ensure that

- The substrate moisture content is less than 4 %.
- The ambient temperature is between 10 – 40^{0}C.
- The substrate temperature is between 10 – 35^{0}C and at least 3^{0}C above dew point temperature.
- The relative humidity is below 75%.

Packaging

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

Shelf life

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

Storage

CIKOpoly TC should be stored under enclosed cold and dry shaded area at temperatures between 5 – 25^{0}C.

Health & safety

CIKOpoly TC 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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