

CIKOcoat T100

Smart Chemical Solutions



سيكو الشرق الأوسط
MIDDLE EAST

Epoxy resin based coal tar extended protective coating

Description

CIKOcoat T100 is a solvent free two component coal tar epoxy coating providing a protective and waterproofing system recommended on concrete and metal substrates with good chemical resistance. It exhibits excellent resistance to soil chemicals when used in below grade applications. It provides excellent adhesion to concrete and metal surface.

CIKOcoat T100 is based on solvent free tar extended liquid resin cured with a special grade of hardener and special additives to provide excellent chemical resistance properties. It offers seamless coating having thickness between 0.4 to 0.5mm.

Properties

- Two component cold applied system.
- Easy maintenance and good resistance to fuel, kerosene, sewage and most chemicals.
- Excellent adhesion to concrete and metal substrates.
- Extends life time of concrete or metal.
- Hard wearing surface exhibits good wear and abrasion resistance.
- Easy to clean and maintain.
- Economical.

Application area

CIKOcoat T100 as a protective coating and waterproofing is suitable to use in many segments such as,

- Sewage treatment plants.
- Below ground protection of concrete or metal structures.
- Power plants and gas refineries.
- Metal pipe coating.
- Manholes and drainages.

Physical properties

Form	Two component system Part-A : Liquid Part-B : Liquid
Colour of mixed material	Black
Solids	99 ±1 %
Mixed Density	1.4±0.02 kg/L
Mixing ratio A:B	1:1 by volume
Pot life @ 25 °C	>30 minutes
Tack Free @25°C	3-4 hours
Initial cure @ 25°C	24 hours
Final cure @ 25°C	7 days
Application temperature	+5°C to +40°C
Service Temperature	-10 °C to +70 °C
Heat resistance	120 °C
Pull off Strength ASTM D-7234	>2.5 MPa (Concrete Failure)
Water Absorption of concrete coated with CIKOcoat T-100 BS 1881:122	NIL (0%)
Consumption	5m ² /L @ 200 micron
Impact Resistance BS3900-1974	No cracking, flacking or detachment from substrate

Chemical Resistance

Tests were carried out in accordance with ASTM D543-14.

Acids	
Hydrochloric acid 10%	Excellent
Sulphuric acid 10%	Very good
Nitric acid 10 %	Very good
Phosphoric acid 10%	Very good

Alkalis	
Ammonia 15%	Excellent
Sodium Hydroxide 25%	Good

Solvents and organics	
Oils, vegetable and minerals	Excellent
Ferric chloride 15%	Very good

Aqueous solution	
Water	Excellent
Sea water	Excellent
Raw sewage	Very good

Coverage

CIKOcoat T100 will provide coverage of 5.0m² per litre @ 200 microns dry film thickness in each coat.

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

Application instructions

Surface preparation

The concrete or metal surface should be free from dust and loose particles. Any traces of oil or grease on the surface shall be cleaned by acid etching and flushed with plenty of clean water and kept enough time to fully dry. All contamination should be treated well before application of CIKOcoat T100. It is possible to apply CIKOpoxy Putty or CIKOMortar FC to repair and resurface concrete surface when required.

New concrete

The new concrete substrate should complete the process of curing and should have a dry surface. The surface should be prepared using mechanical scrubbers or electrical grinders to remove loose and un-bonded particles. The whole surface must be cleaned using compressed air to make it free from dust and loose particles just before the application of coating.

Old concrete

All contamination such as oil / chemical spillage or pot holes should be treated. The surface should be prepared using mechanical scrubbers or electrical grinders to remove loose and un-bonded particles. All potholes and cracks must be repaired well in advance with CIKOpoxy Putty or CIKOMortar FC. The whole surface must be cleaned using compressed air to make it free from dust and loose particles just before the application of coating.

Metal surface

The metal surface must be sand blasted to a degree of SA 2.5 to remove rust and other contamination. Immediately apply the first coat of CIKOcoat T100 over the sand blasted surface.

Mixing

The base component [Part-A] of CIKOcoat T100 should be mixed thoroughly using a heavy duty slow speed drill fitted with paddle and ensure a homogenous mix. The hardener component [Part-B] should be poured into the base component [Part-A] and mixed well until a homogenous mix is obtained.

Application of topcoats

Properly mixed material should be applied using brush or roller at a rate of 0.2 L/m²/coat over the clean and dust free surface maintaining the required thickness. Apply the second coat at the same rate of consumption after 6 to 12 hours of the application of the first coat.

It is always recommended to apply CIKOcoat T100 in two coats minimum achieving a minimum total thickness of 400 microns DFT.

Packaging

CIKOcoat T100 is available in 10L (14 Kg), 20 L (28kg) kits and 400 kg set consisting of Part-A & B.

Shelf life

CIKOcoat T100 has a shelf life of 12 months if stored in accordance with CIKO instructions.

Storage

CIKOcoat T100 should be stored under cool enclosed shaded area at temperatures between 5 – 35^oC.

Precautions

CIKOcoat T100 should not be applied at temperatures below 10^oC.

Health & safety

CIKOcoat T100 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 for 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 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.

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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Note: The information presented herein based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control



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