

CIKOcoat PUW



Aliphatic-Polyurethane water based top protective coating

Description

CIKOcoat PUW is two components water borne aliphatic polyurethane pigmented protective coating that provides excellent chemical and abrasion resistance. The product is recommended as a topcoat over epoxy and polyurethane floor and wall coating systems.

The cured coating exhibits UV stability and weathering resistance properties.

CIKOcoat PUW provides a coloured matt finish seal coat recommended in 2 thin layers/coats.

Properties & Advantages

- Hard finish with excellent impact and abrasion resistance
- Provides tough topcoat
- Exhibits good impact and slip resistance.
- UV stable and UV resistant
- Hygienic and easy to clean
- Water based; Low VOC
- Compatible with most epoxy and polyurethane based products.

Application area & Uses

CIKOcoat PUW is suitable to be used as floor and wall top protective coating

- Topcoat for CIKO traffic coating systems and CIKO sport flooring systems
- topcoat over cement-based substrates both Interior and exterior applications
- Utility services elements in commercial buildings
- Residential garage and basement areas
- Walkways and loading bays.

Coverage & Recommended thicknesses

15 L kit of CIKOcoat PUW covers theoretically between 97 and 107 m² at 100 microns DFT. It is recommended to apply CIKOcoat PUW in minimum two coats to achieve a total 200 microns DFT.

Note: Coverage rates given are theoretical. Due to wastage and the variety or/and nature of substrates, practical coverage figures may be reduced, this will vary with site and application conditions

Physical properties

Form	Two component system Part-A : Pigmented Liquid Part-B : Clear Liquid
Colours	Wide range of colours including RAL colour codes
Mixed density	1.45 ± 0.03 Kg/L
Mixing ratio (by weight)	Pre-weighted, partial mixing is not recommended
Solid Content (by weight and volume)	68 ± 3 %
Allowable dilution percentage (potable water)	5-10% by volume
Pot life (4 L kit)	45 – 60 mins @ 25°C 25– 35 mins @ 35°C
Overcoating time	Minimum 12 hours Maximum 48 hours
Final cure	6 days @ 25°C 4 days @ 35°C
Impact Resistance (4 kg, 150 mm)	No crack
Permanent service temperature	-5°C up to +75°C
Abrasion Resistance ASTM D4060 (CS-10, 1000 cycles, load 1000 g)	≤70 mg
Pull off Bond Strength ASTM D7234	≥ 1.5 N/mm ² (concrete failure) ≥ 2 N/mm ² (epoxy/polyurethane)

Packaging

CIKOcoat PUW is available in 4 L and 15 L kits consisting of Part-A & B.

Application Instructions

Surface preparation of cement-based substrates

The cement-based substrate shall be fully cured aged at least 28 days achieving a surface pull off tensile strength of 1.5 N/mm². The concrete surface should be free from dust and loose particles or weak thin layers. All contamination such as oil, grease and extraneous spillages must be cleaned using the suitable cleaning agent. Concrete shall be diamond disk grinded, grit/shot blasted or treated with equivalent and suitable mechanical means. The treated substrate must have a surface moisture content not exceeding 4% prior proceeding with primer application.

All cracks, deteriorated areas, joints shall be well treated and addressed using the appropriate epoxy-based repair and injection materials from CIKO wide range of products prior to the application of the primer or first coat of CIKOCOAT PUW

Priming

Priming is required, use a water based or solvent free two components epoxy-based primers such CIKOPoxy Prim 14 or CIKOPoxy Prim WB to prime the substrate. The base [Part-A] and hardener [Part-B] components of the primer should be mixed thoroughly using a heavy duty, adjustable speed drill paddle assembly for three to four minutes and ensure a homogenous mixture is obtained.

To achieve an anti-slip textured surface, broadcast CIKO ASG (0.1-0.3mm) or CIKO ASG (0.3-0.5mm) over the still wet primer at a consumption rate not exceeding 1.2 kg/m².

Application instructions 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 prior proceeding with application of CIKOCOAT PUW further coats.

Surface preparation of epoxy and polyurethane base coats

The base coat should be polyurethane, or epoxy based compatible with CIKOCOAT PUW proven by testing. Abrade the surface of existing coating with the suitable grit size of sandpaper. Clean the surface from dust and sanding debris using an air blower or/and vacuum followed by a cotton rag dipped in CIKOSol/CIKOSolvent-20 and allow the surface to dry.

In case of any oil spillage on the surface, clean the surface with suitable degreasing liquid to remove the oil from the surface. Vacuum cleaning shall be redone to remove any re-deposited dust.

Mixing

The base component [Part-A] of CIKOCOAT PUW should be mixed thoroughly to achieve a homogeneous colour. If required and depending on the method of application, dilute CIKOCOAT PUW with clean potable water at a percentage ranging between 5 and 10% by volume. Dispense The hardener component [Part-B] into the base component whilst the mixer is in the running mode and further mix for minimum 3 minutes until a homogenous mixture and colour are obtained.

Application Method

Apply CIKOCOAT PUW by brush, short nap high quality roller or airless spray at a rate ranging between of 0.14 L/m² and 0.17 L/m² (Maximum 100 microns DFT/coat) and allow drying for minimum 12 hours depending on prevailing ambient conditions. A second coat is always required at the same consumption rate to increase the mechanical strength, abrasion resistance and hiding properties.

Precautions & Recommendations

- Ambient temperature is between 10°C and 35°C.
- Substrate temperature is between 10°C and 35°C and minimum 3°C above dew point temperature to prevent risk of condensation and blooming on the floor finish.
- Relative humidity does not exceed 75%.
- The final coat shall be protected from foot traffic, any source of water or rain for at least 24 hours and will be ready for use after minimum 4 days.

Shelf life

CIKOCOAT PUW has a shelf life of 6 months if stored in accordance with CIKO instructions.

Storage

CIKOCOAT PUW should be stored in its original packaging under enclosed shaded area away from direct sunlight, rain and moisture at temperatures between 5 – 25°C.

Health & safety

CIKOCOAT PUW 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 meets 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

Legal Notice and Warranty

CIKO warrants this product to be free from manufacturing defects and to meet the technical properties stated in the current Technical Data Sheet, if used as directed within its shelf life. Satisfactory results depend not only on quality of product but also on many factors beyond our control. CIKO makes no other warranty or guarantee, express or implied, including warranties of merchantability or fitness for a particular purpose with respect to its product. The sole and exclusive remedy of purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the sole option of CIKO. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by purchaser. CIKO will not be responsible for any special incidental, consequential including lost profits or punitive damages of any kind. Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on CIKO's present knowledge and experience. However, CIKO assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. CIKO reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified expert.

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All CIKO products are manufactured under a strict management system conforming to and in compliance with requirements of international standards of Quality, Environmental, occupational Health and Safety ISO 9001, ISO14001 and ISO45001.



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