

CIKOtile Poxy



Water Cleanable, Chemical and Heat Resistant Epoxy Resin Based Tile Adhesive

Description

CIKOtile Poxy is three components epoxy resin based chemical and heat resistant tile setting adhesive suitable for vertical and horizontal applications for fixing ceramic, marble, stone, porcelain and all types of water-sensitive tiles over concrete/screed or metal substrates. It is suitable for bedding thicknesses ranging from 2mm up to 15 mm.

CIKOtile Poxy is three component system based on epoxy resin cured with special grade hardener and fillers.

Properties & Advantages

- Three component epoxy resin based tile adhesive system, easy to mix and apply.
- Excellent resistance to chemical and fungal growth.
- 100% solids with low linear shrinkage
- Resistant to water, heat, freezing thaw cycles and high thermal shocks
- Water cleanable and spreadable
- Provides waterproof bedding.
- Compatible with all types of tiles and substrates.
- Multipurpose adhesive for bedding and repairs.
- Extended open time up of 20 minutes

Application Area & Uses

CIKOtile Poxy is suitable to install all types of tiles including water sensitive stones in both industrial and commercial segments requiring high chemical, thermal shock and heat resistance such as:

- Hospital and laboratories
- Food and beverage industries
- Chemical production and processing units.
- Swimming pools and Jacuzzis
- Garages and battery rooms
- Kitchens, bathrooms and pantries
- Fountains

Applicable standards

CIKOtile Poxy complies with minimum performance requirements of ANSI A118.3, BS EN 12004 & ISO13007-1 code R2T

Physical properties

Form	3 component system Part-A & B : Liquid Part-C : Powder
Colour	Beige/Grey
Mixing ratio	Pre-packed system
VOC USEPA-24	≤ 30g/L
Pot life	45-55 mins @ 25 °C 30-40 mins @ 35 °C
Full cure	7 days @ 25 °C
Initial Setting time ASTM C308	6-7 hours
Sag in Vertical Joint ANSI A118.3-E5.4	No change
Compressive Strength ASTM C-579 at 7 days	≥45 N/mm ²
Tensile Strength ASTM D638	≥7 N/mm ² @ 7days
Water clean ability ANSI A118.3-E5.1	≥80 minutes
Linear Shrinkage ASTM C531	<0.15%
Shear Bond Strength ANSI A118.3-E.5.8	≥7 N/mm ² (Standard Conditions) ≥3.5 N/mm ² (Thermal Shock)
Tensile Bond Strength at all 4 conditions as per EN 1348	≥2.5 Mpa

Chemical Resistance

CIKOtile Poxy is resistant to wide range of chemicals when tested fully immersed for 7 days. Specific data is available as below table:

Test Solution	Test Conditions	Observation & Test Result
Hydrochloric Acid	23± 2°C (7 days)	No Characteristics Observed (Resistant)
Tartaric Acid		
Acetic Acid		
Mineral Water		
Sodium Hydroxide		
Potassium permanganate		
Sea Water		
Petrol		
Kerosene		
Hydraulic oil		
Kerosene		
Xylene		

Coverage

CIKOtile Poxy provides coverage as follows:

	20 Kg Kit	6 Kg Kit
6*6 mm Notched	3.3 m ²	1 m ²
4*4 mm Notched	5.0 m ²	1.5 m ²

Coverage rate may vary depending on substrate conditions and finish. Bedding thickness can be maintained from 2mm to 15 mm thick solid bed.

Note: the coverage of 4*4 mm notched results in 2 mm thick solid bed.

Application instructions

Substrate & tile preparation

The concrete/screed or metal surface should be free from dust, rust and any loose particles. In case of traces of oil and grease, the surface shall be treated by acid etching or sand blasting. Curing compounds and sealers, if present, must be removed by mechanical means such as diamond disk grinding. Ensure the substrate and bottom side of tile are sound, clean, uncoated and dry before the application of CIKOtile Poxy.

Mixing

The base [Part-A] and hardener component [Part-B] of CIKOtile Poxy should be mixed thoroughly using a heavy duty adjustable speed drill-paddle assembly for two to three minutes in clean container of minimum capacity 25 L and ensure a homogenous mix is obtained. The third component [Part-C] must be dispensed gradually into the container whilst mixing. Continue mixing at high speed until a homogenous mix is obtained. Over mixing may reduce the pot life of the material.

It is applicable to adjust the amount of [Part-C] added while mixing from 80 to 100 % of its weight to achieve the desired consistency. For thick bedding it is advisable always to use full amount of [Part-C].

Application

Spread the mixed material over the dry cleaned area to a uniform thickness. Comb the applied surface using a semi-notched trowel. Press the tile firmly to the adhesive bed in perpendicular motion to notched lines and ensure that the tile is firmly bonded to the substrate. Adjust the tile within 10 to 15 minutes after initial positioning.

At high ambient temperatures, it is advisable not to increase the spreading area over the surface so that installation of the tiles takes place within the open time of the adhesive (20 minutes) to prevent skin formation and maintain proper bonding performance.

Packaging

CIKOtile Poxy is available in 6 and 20 kg kits consisting of Part-A, B & C.

Storage

CIKOtile Poxy should be stored under enclosed shaded areas at temperatures between 5°C and 35°C.

Shelf life

CIKOtile Poxy has a shelf life of 12 months when stored in its unopened original packaging as per CIKO's recommendations.

Precautions

- CIKOtile Poxy should not be applied at temperatures below 10°C.

Health & safety

CIKOtile Poxy should not come in contact with eyes or to 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 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 is 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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