CIKOTILE GROUT EP



Chemical resistant, anti-bacterial & water cleanable epoxy resin based tile grout

Description

CIKOtile Grout EP is three components epoxy resin based chemical resistant & water cleanable tile grout for vertical and horizontal applications to fill joint gaps between tiles. It is suitable for ceramic, porcelain, stone, glazed tiles and marble tiles.

CIKOtile Grout EP is based on epoxy resin cured with special grade hardener and fillers suitable for tile joint width ranging from 1mm up to 15mm

Properties & Advantages

- Three component, solvent free epoxy resin based tile grout.
- Excellent resistance to chemicals.
- Available in wide range of colours.
- Reduce fungal and bacterial growth.
- Provides waterproof joints.
- Compatible with all types of tiles and adhesives
- Provides hygienic environment.
- Water cleanable
- Heat and water resistant
- Dimensionally stable exhibiting very low shrinkage

Application Area & Uses

CIKOtile Grout EP is suitable to fill joints of 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 grout EP complies with minimum performance requirements of:

- ANSI A118.3
- ISO13007-3 & EN13888 Class RG

Physical properties

Physical properties		
Form	3 component system Part-A & B : Liquid Part-C : Powder	
Colour	As per CIKOtile Grout physical colour chart	
Mixing ratio	Pre-packed system	
	40-45 mins @ 25 °C	
Pot life	25-30 mins @ 35 °C	
Initial set	7 hours @ 25 °C	
Full cure	7 days @ 25 ⁰ C	
Compressive strength ASTM C579 @ 7 days	≥60 N/mm ²	
Tensile strength ASTM D638 @ 7days	≥20 N /mm²	
Flexural strength ASTM C580 @ 7 days	≥ 11 N /mm ²	
Sag in Vertical Joints ANSI A118.3-5.4	No change	
Linear Shrinkage ASTM C531	≤0.05%	
Shrinkage (EN12808-4/ ISO 13007-4)	≤1 mm/m	
Water clean ability ANSI A118.3-E5.1	≥80 minutes	
Service temperature	10 ^o C to 90 ^o C	
Reduction in Bacterial Activity after 24 hours incubation at 37°C ASTM E2180-18	>85%	
Water Absorption EN12808-5/ ISO 13007-4	<0.1g (240min)	
Abrasion Resistance EN 12808-2/ ISO 13007-4	<250 mm ³	
VOC (USEPA-24)	<15g/L	



Chemical Resistance

CIKOtile Grout EP 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		
Tartaric Acid		
Acetic Acid		
Mineral Water		
Sodium		
Hydroxide		
Potassium	23± 2°C	No
		_
permanganate	(7 days)	Characteristics
Sea Water		Observed (Resistant)
Petrol		,
Kerosene		
Hydraulic oil		
Kerosene		
Xylene		

Coverage

14 kg kit of CIKOtile Grout EP yields 10 litres of fresh grout. The coverage depends on tile dimensions and joint width.

Consult CIKO technical service department for further guidance.

Application instructions

Joint preparation

The tile joints must be cleaned to remove any un-bonded and excess tile adhesive used for fixing tiles.

All contaminations, dirt, paint or loosely held materials must be removed.

Mixing

Mix the base [Part-A] individually in its original packaging using a heavy duty adjustable speed drill-paddle assembly mixer for 1 to 2 minutes to attain a homogeneous colour. Transfer [Part-A] to a clean container of minimum capacity of 15 L, pour [Part-B] whilst mixing for further 1 to 2 minutes. The third component [Part-C] must be dispensed gradually into the mix whilst mixing at highest speed for further 3 minutes. Over mixing may reduce pot life of the material and increases air entrapment.

Application

Fill the tile joints with the mixed material by pressing the material into the joint using spatula or steel scrapper. Remove the excess material and within 30 minutes finish the surface using damped/wet sponge in a circular motion. Clean the sponge continuously by dipping it in water. Grout stains on the tiles must be cleaned immediately.

Note: Cleaning of tiles and tools must be finished before CIKOtile Grout EP gets dried.

Packaging

CIKOtile Grout EP is available in 7 and 14 kg packs consisting of Part-A, B & C.

Shelf life

CIKOtile Grout EP has a shelf life of 12 months if is stored in accordance with manufacturer instructions.

Storage

CIKOtile Grout EP should be stored under enclosed shaded area at temperatures between $5 - 35^{\circ}$ C.

Precautions

- CIKOtile Grout EP should not be applied at temperatures below 10 °C.
- Long exposure to UV radiations might result in yellowing.

Health & safety

CIKOtile Grout EP 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 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









