

Cicotile®EP105

Epoxy Tile Adhesive and Joint Grouting

DESCRIPTION

Cicotile®EP105 is a three component; high quality solvent free epoxy based tile adhesive and grouting mortar. It is used to fix and grout all kinds of ceramic and porcelain tile joints permanently. It is designed to resist the highest chemical attack environments. Cicotile®EP105 is designed for fixing and grouting chemical resisting bricks. Cicotile®EP105 is ideal to be used for lining, and repair works especially in chemical tanks like desalination and demineralization basins.

USES

- Vertical and horizontal tile and anti-acid bricks fixing and grouting.
- For food processing industries.
- Lining and repair of chemicals storage tanks of petroleum and water structures.

ADVANTAGES

- High chemical resistance.
- Hygiene, waterproof and has high resistance to mold growth.
- Available in a wide range of colors.
- Suitable for hot and tropical climates.
- Long open time.
- High bond with concrete, steel, and tiles.
- Multipurpose.
- Non-sag and non-shrinking.
- High mechanical characteristics.

STANDARD COMPLIANCE

ANSI 118.3, and ANSI 118.6

PACKAGING

10, 20 and 25kg sets.

SHELF LIFE & STORAGE

12 months storage life if stored in its original unopened containers under a dry and shaded place in a temperature from 5°C to 40°C.

TECHNICAL PROPERTIES

Form	Fine mortar
Color	Variable
Volume solids	100%
Density @ 25°C	1.85±0.02 kg/ltr
Open time @ 25°C	60±5 min.
Drying time @ 25°C	12±15 hr.
Complete curing time	7 days
Yield	10.8 ltr/20 kg set
Application temperature range	5 to 40°C
Compressive strength @ 7 days (ASTM C579)	98±2 N/mm ²
Flexural strength @ 7 days (ASTM C580)	22±0.25 N/mm ²
Tensile strength @ 7 days (ASTM C307)	12±0.25 N/mm ²
Bond strength @ 7 days	8.5±0.5 N/mm ²
Coverage	3.7 kg/m ² @2 mm DFT

CHEMICAL RESISTANCE

The fully cured Cicotile®EP105 is resistant to the following chemicals:

- Saltwater
- Benzene
- Acetic acid 20%
- Ammonia 30% & Alum at 60°C
- Chlorine
- Citric acid 20%
- Hydrochloric acid (HCl) 50%
- Nitric acid (HNO₃) 40%
- Lactic acid 20%
- Soda solution (saturated) (Na₂CO₃)

- Sulphuric acid (H₂SO₄) 50%
- Sodium hydroxide 40g/L
- Phosphoric acid (H₃PO₄) 20%
- Formic acid 10%

APPLICATION INSTRUCTIONS

Surface Preparation

All surfaces to be treated must be clean, dry, and free from dust, rust, and laitance. Dense concrete should be abraded followed by surface cleaning using a suitable brush. Laitance, oil, and grease can be removed using either Cicosurface® Degreaser, sandblasting, or steam cleaning.

Mixing

Stir the contents of component A separately first, then add component B to component A in its tin and mix them well using mid speed drill for one minute. After having the resin mixed, add component C slowly while mixing with a powerful slow speed shear mixer till producing a homogenous mortar.

Application

The mixed Cicotile® EP105 can be spread over the surface using a serrated trowel or comb. Place tiles or anti-acid bricks within the open time of the adhesive with gentle squeeze pressure. The recommended application adhesive thickness is 1-3 mm. When using Cicotile® EP 105 for grouting, be sure that joints are completely filled using either suitable spatulas or gloved fingers. Cleaning of excess material can be done carefully with a cloth wetted with Cicosolvent® before curing takes place. When using Cicotile® EP 105 for lining, it should be compacted tightly to ensure maximum substrate adhesion and density. The finished surface may be smoothed using a paintbrush or trowel dipped in Cicosolvent®. The thickness limit of this application is 2-5 mm.

LIMITATIONS

Cicoptile® EP105 will not cure adequately below 5°C. In cold weather keep the epoxy resin components in a warm environment prior to use. Bulk mixing of epoxy resins can lead to self-heating. Care should be exercised to limit the conditions whereby overheating may occur.

CLEANING

Tools contaminated with Cicotile® EP105 can be cleaned using Cicosolvent®. Hardened material can be removed by mechanical means.

PRECAUTIONS

Health And Safety

Cicotile® EP105 should not be swallowed or allowed to come into contact with skin or eyes. Suitable protective goggles and gloves should be worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When contact with the skin is made, wash off immediately with soap and water. If swallowed, seek medical attention immediately, do not induce vomiting.

TECHNICAL SUPPORT

CIC provides on-site assistance, as well as consulting services on projects when requested. Technical data sheets on other CIC products and guidance on their use are available on request.

Warranty

CIC products are guaranteed against defective materials and manufacture and sold subject to CIC's standard terms and conditions of sale. Whilst CIC endeavors to ensure that any advice, information or recommendation given is correct, the company cannot accept any liability either directly or indirectly arising from the use of its products. User of the product must test the product's suitability for the intended application and purpose, since the company has no control over the application of its products. Information contained in this document is given on the best current knowledge. Our Products are in continuous development and CIC reserves the right to change the product without prior notice.

