

EAMIGROUT EP ANCHOR

Epoxy Resin Adhesive for Anchoring

Product Description

EAMIGROUT EP ANCHOR is two components, solvent free (100% solids), non - shrink and corrosion resistant epoxy resin adhesive mortar. It is based on a combination of carefully selected exceptional strength epoxy resin well- selected curing agents and special fillers. It is supplied as pre-weighed two component pack, which after mixing will produce non shrink, excellent adhesion to concrete and masonry surfaces. EAMIGROUT EP ANCHOR is chemical resistant, and is a high mechanical & physical epoxy bonding mortar.

Typical Applications

EAMIGROUT EP ANCHOR has been designed for successful application of :

- Anchoring of bolts and bars into concrete, rocks and masonry .
- Structural bonding of carbon fibers & glass-fibers reinforcement to concrete, steel plates to concrete, concrete elements and bridge segments
- Bedding bridge beams and steel bridge bearings.

- To fill bolt pockets (vertical & overhead).
- Repair of damaged concrete in areas subject to chemical attack.
- Bedding tiles, anti-acid tiles and slip bricks to concrete.

Product Features

- Easy to mix and to apply.
- Solvent-free, odourless.
- Moisture insensitive allowing installation and curing in damp environments.
- Non-sag in vertical & overhead applications.
- shrink-free curing.
- Resisting to chemicals
- High strength & mechanical properties.
- Superior adhesion to most substrates.
- Achieves high abrasion resistance, impact resistance, and shock resistance.
- Specially formulated to be suitable for the Middle East climates.

Standards

EAMIGROUT EP ANCHOR complies with the requirements of ASTM C 881: "Epoxy Resin Base Bonding Systems for Concrete" Type IV Grade 3 Class B & C.

Technical Properties

Appearance	Thixotropic grey viscous liquid (mixed materials)
Mixed Density	1.65 ± 0.05 kg /liter
Pot Life @30°C	30-40 minutes
Flash Point	> 150°C
Chemical Resistant	EAMIGROUT EP ANCHOR is resistant to most of the common chemical reagents including water, sea water chlorides & sulphate and other corrosive salts, inorganic & organic acids, alkalis, petrol, oil, kerosene, etc. For more details about specific Chemical reagent, consult Eamic Technical Support
Compressive Strength	75 N/mm ² (ASTM D-695)
Flexural Strength	15 N/mm ² The above typical results for samples cured after 7days@ 25°C
Bond Strength, ASTM C- 882	3 N/mm ²
Water absorption (24 hrs)	0.2 % (ASTM D-570)
Elongation at break	Less than 2 % (ASTM D-638)
Linear Coefficient of Shrinkage	0.005 cm /cm (ASTM C-844)
Heat Deflection Temperature	60°C (ASTM D-648)
Coefficient of Thermal Expansion	43 x 10 ⁻⁶ /°C (ASTM C-580)

Note: The above tests are carried out under controlled laboratory conditions.

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Table 1 The relation between the minimum whole depth, whole diameter and concrete strength.

Steel Bar Diameter (mm)	Hole Diameter (mm)	Minimum Depth (cm), Concrete Compressive Strength (kg/cm ²)		
12	20	20/290	25/250	30/220
16	20	20/480	25/440	30/400
20	25	20/600	25/550	30/500
25	32	20/750	25/675	30/600
32	40	20/1000	25/950	30/850
40	45	20/1400	25/1200	30/1100

Guide for Applications

Surface Preparation

All surfaces shall be sound, clean, free from water, oil & grease and other contaminants, which may affect the bond between EAMIGROUT EP ANCHOR and the substrate. Primer is not required. Steel bars should be free from rust and the metal surfaces should be treated to reach a shining surface .

Mixing

Stir each component well before mixing to ensure that all the materials are dispersed. Pour the contents of Component B (Curing agents) to the container of Component A (Resin) and mix well until homogenous colour and consistency is achieved. A mechanical mixer can be used at (400 – 500) rpm.

Application

If EAMIGROUT EP ANCHOR is used for anchoring bolts or steel reinforcements, the mixed materials should be injected to the rear of the hole avoiding air entrapment. The thixotropic nature of the mixed materials will prevent flowing out from the hole

Warranty

We warrant our products to be of good quality & manufactured to rigid standards. This Warranty is in lieu of any & all other warranties expressed or implied. This data sheet is published for information only. It is believed to be correct but no liability is accepted for it or the suitability of the product for any particular purpose. EAMIC TRETOL services are free & the company does not accept liability for any loss arising from it. Max liability is limited to substituting the same quality of material .

If EAMIGROUT EP ANCHOR will be used as bonding agent or gap filler, trowel the mixed materials to the required level on the prepared substrate. The joint should be closed immediately within the open time .

Cleaning

Clean all the tools and equipment with EAMIC SOLVENT immediately after use.

Packaging

EAMIGROUT EP ANCHOR is supplied in 4 kg container.

Shelf Life

One year when stored in its original unopened package.

Storage

It should be kept in dry warehouse away from any extreme temperatures.

Health and Safety

- Epoxy resins contain irritants, especially to the skin and eyes.
- Use appropriate protective clothing.
- If an epoxy resin should contact the skin, it should be removed immediately with dry cloth or paper towel and the area of contact washed thoroughly with soap and water.

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