

3-component, high strength pourable epoxy grout

Description

EPOMAX-MT is a 3-component, pourable, high-strength, non-shrinking cast grout, based on a 2-component solvent-free epoxy resin (Parts A & B) and on a special selected quartz sand (Part C). It provides:

- Very good fluidity.
- High initial and final strength.
- Excellent bond strength to steel and concrete.
- Resistance to impacts and vibrations.
- Chemical resistance.
- Waterproofing.

Certified with the CE marking according to EN 1504-3

Fields of application

As a grout for:

- Anchor bolts.
- Machine bedding.
- Bridge bearings.
- Stanchions.

It can be also used as a pourable mortar for repairs in damaged concrete elements.

Technical data

Basis (A, B):	2-component epoxy resin
Basis (C):	quartz sand
Mixing proportion (A:B:C):	3:1:16 by weight
Form:	flowable mortar
Color (A+B+C):	light grey
Density (A+B+C):	1,9 kg/l
Pot life:	approx. 40 min at +23°C
Minimum hardening temperature:	+8°C
Walkability:	after 16 h at +23°C

Successive layer: within 24 h at +23°C

Final strength: after 7 days at +23°C

Compressive strength: >90 N/mm² (EN 12190)

Flexural strength: >30 N/mm² (EN 12190)

Chloride content: 0,00% (EN 1015-17)

Adhesive strength: > 3 N/mm² (breaking point of concrete) (EN 1542)

Adhesion after 50 freeze thaw cycles: >3 N/mm² (breaking point of concrete) (EN 13687-2)

Capillary water absorption: <0,1 kg·m⁻²·h^{-0,5} (EN 13057)

Cleaning of tools:

Tools should be cleaned with SM-25 solvent immediately after use.

Directions for use

1. Substrate

The surface should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease, form oils, curing membrane, old coatings etc.

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, pellet blasting, etc. Following this, the surface should be cleaned from dust by air blasting.

2. Formwork

The formwork used for casting the grout must be leak proof and arranged so to allow gravity flow to fill completely the void to be grouted. A deshuttering agent is recommend to be applied on the forms, such as SPLIT-2000, to allow their easy removal.

3. Mixing of the components

Components A (resin) B (hardener) and C (sand) are packed in separate containers, having the correct predetermined mixing proportion by weight.

Initially component A is stirred well. Then the whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 1-2 minutes, using a low revolution mixer (300 rpm). It is important to stir thoroughly the mixture near the sides and bottom of the container, to succeed uniform dispersion of the hardener. Move the mixed A and B components to a larger clean vessel and continue mixing while adding Part C slowly. The mixing is being done by using a low revolution mixer (300 rpm) until an even distribution of the aggregate throughout the mix has been achieved (approximately for 3-5 minutes).

4. Application - Consumption

Mixed EPOMAX-MT should be poured into the formwork from one side continuously, to avoid air entrapment. For bolt anchoring fill first at least half the volume of the performed holes before placing the bolt in the grout.

Avoid layer thickness above 5 cm per layer. If necessary apply a successive layer within 24 hours from the application of the first layer.

Consumption

The consumption of EPOMAX-MT is approximately 1,9 kg per liter.

Packaging

EPOMAX-MT is supplied in packages (A+B+C) of 25 kg.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and frost. The recommended storage temperature is between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, EPOMAX-MT is totally safe for health.
- Before application, study the safety advice mentioned on the product's label.

EPOMAX-MT



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EN 1504-3

Concrete repair product, PC (Polymer Concrete)

Compressive strength: class R2

Chloride ion content: $\leq 0,05\%$

Adhesive Bond: $\geq 0,8$ MPa

Thermal compatibility part 1: $\geq 0,8$ MPa

Capillary absorption: $\leq 0,5 \text{ kg} \cdot \text{m}^{-2} \cdot \text{h}^{-0,5}$

Dangerous substances: comply with 5.4

Reaction to fire: Euroclass F

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