

MAPEPOXY CEM-S

Three-component cement-epoxy putty for smoothing concrete surface



WHERE TO USE

For full-surface levelling and pore-filling of surfaces before flooring is laid. It can also be used as an adhesive mortar or grout for ceramic tiles.

Some application examples

- Balcony floors
- Water-treatment plants
- Pilasters and pillars
- Silage silos

TECHNICAL CHARACTERISTICS

Mapepoxy Cem-S consists of a water-based epoxy (components A and B) and a cementitious filler (component C). Once mixed, the product is pliable.

Mapepoxy Cem-S is compliant with the principles described in EN 1504-9 ("Products and systems for the protection and repair of concrete structures. Definitions, requirements, quality control and evaluation of conformity. General principles for the use of products and systems") and the requirements described in EN 1504-3 ("Repair mortar for structural and nonstructural repair"), class R3.

RECOMMENDATIONS

Do not add additional water or other admixtures. **Mapepoxy Cem-S** should only be applied at temperatures above +10°C. Do not split the set, unless the components are weighed carefully.

APPLICATION

Preparation of the substrate

Remove any loose material and anything that would reduce adhesion (dirt, cement paste, coatings, etc.), e.g. by sandblasting or pressure washing, to ensure that the pore structure is opened up as much as possible. Before application, pre-wet the substrate until it is saturated, and then allow it to dry until it is matt but damp.

Preparation of the product

Mix components A and B together before use. Pour component A into the container with component B and mix well using a slow drill with a whisk attachment for 3 - 4 minutes, until the mixture is uniform in colour and homogeneous. Then add component C (the filler) gradually and mix until lump-free and homogeneous.

Application

The temperature of the substrate must be at least +10°C. Spread the mortar onto the substrate with a steel trowel or steel float. Then finish the surface with a steel trowel or a sponge float. Do not add extra water when finishing. If an extra coat of primer or sealant is required, pure binder (component A and B) can be used. On porous concrete, working the material with a lightly dampened brush or felt trowel is beneficial and will make it easier for the **Mapepoxy Cem-S** to fill the pores.

NB: Do not add water to the brush or trowel while working.

CONSUMPTION

Mapepoxy Cem-S (A+B+C) has a consumption level of approximately 1.9 kg/m² per mm thickness.

CLEANING

Clean all tools and equipment with water immediately after use. Hardened material must be removed mechanically.

PACKAGING

Mapepoxy Cem-S consists of component A (0.65 kg), component B (2 kg) and component C (8 kg).

STORAGE

12 months in original sealed packaging stored in a dry area and at a temperature between +10°C and +30°C.

Mapepoxy Cem-S component C meets the requirements of Annex XVII to the REACH Regulation (EC) No 1907/2006, item 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY	Component A	Component B	Component C
Colour:	transparent	transparent	grey
Appearance:	flowable	flowable	powder
Density (g/cm ³):	1.13	1.03	2.02

PRODUCT APPLICATION DATA (at +23°C, 50 % RH)	
Mixing ratio:	comp A : comp B : comp C = 0.65 : 2 : 8
Colour of mix:	light grey
Consistency of mix:	thixotropic
Density of mix:	1.87
Pot life of mix:	30 minutes
Application temperature range:	from +10°C to +30°C

FINAL PROPERTIES

Performance characteristic	Test method	Requirements pursuant to EN 1504-3 class R3	Result for the product
Compressive strength (N/mm ²):	EN 12190	> 25	42 (28 days)
Chloride ion content (%):	EN 1015-1	≤ 0.05	0.02
Bond strength to concrete (pull-off) (N/mm ²):	EN 1542	> 0.8 (R1) > 1.5 (R3)	1.8
Shrinkage around fixing device (N/mm ²):	EN 12617-4	-	NPD
Resistance to carbonation:	EN 1062-6	not relevant for PC mortar	NPD
Modulus of elasticity (GPa):	EN 13412	> 15	NPD
Thermal compatibility, part 1: freeze-thaw cycles:	EN 13687-3	> 0.8 (R1) > 1.5 (R3)	1.6
Slip/skid resistance:	EN 13036-4	declared value	NPD
Coefficient of thermal expansion:	EN 1770	-	NPD
Capillary absorption (kg/m ² ·h ^{0.5}):	EN 13057	≤ 0.5	NPD
Fire resistance:	Euroclass	-	NPD

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above - information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the technical data sheet, available from our web site www.mapei.no

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