Technical Datasheet

MEGAGROUT-101

High strength, pourable, non-shrink grout for precision grouting of machinery

Description

High strength, pourable, non-shrink grout with special additives. It provides:

- Very good fluidity without segregation.
- High initial and final strength.
- Efficient bonding to steel and concrete.
- Resistance to impact and vibration.
- Low water permeability.

Certified according to EN 1504-3 and EN 1504-6, classified as a CC R4 mortar for concrete repairs and as an anchoring product for reinforcing steel bars respectively. Certificate No.: 2032-CPR-10.11. CE marked. Classified as a type C grout according to ASTM C 1107-99.

Fields of application

MEGAGROUT-101 is suitable for:

- Seating and encasing of machinery.
- Anchoring.
- Grouting of base plates of precision machinery.

Technical data

Form:	cementitious powder
Color:	grey
Grain size:	up to 3 mm
Water demand:	3.50 l/25 kg bag
Bulk density of dry mortar:	1.60 ± 0.10 kg/l
Bulk density of fresh mortar:	2.35 ± 0.10 kg/l
Compressive strength:	
• After 24 hours:	> 45.00 N/mm^2
• After 7 days:	> 60.00 N/mm^2
• After 28 days:	> 70.00 N/mm^2
Flexural strength:	> 10.00 N/mm^2
Elastic modulus:	≥ 20 GPa
Carbonation resistance:	Pass
Chloride ion content:	0.00 %
Adhesion:	≥ 2.80 N/mm^2
Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 2.60 N/mm^2
Capillary water absorption:	0.49 kg·m^{-2}·h$^{-0.5}$
Reaction to fire:	Euroclass A1
Pot life:	1 h at +20^{0}C
Max. thickness/layer:	10 cm

Directions for use

1. Substrate preparation

The substrate must be clean, free of dust, grease, etc. Furthermore, it must be roughened in order to ensure proper bonding of the grout on it. Before application, it is recommended to thoroughly dampen the substrate.

2. Application

After being hydrated, MEGAGROUT-101 becomes a fluid, fine-grained mixture, so part of it may escape the joints between particular elements of the formwork.

Therefore, formwork joints must be sealed with AQUAFIX rapid-setting cement or RAPICRET fast-setting patching mortar.

MEGAGROUT-101 is gradually added to 3.0 l of water and mixed well with a low speed mixer (300 rpm.), until a uniform fluid mass is formed. An additional amount of up to 0.50 l of water is added under stirring, until the desired fluidity is achieved. The mixture is then poured, taking care to avoid air entrapment. In any case, it must be ensured that the grout has filled the whole space between the formwork and the existing construction.

Surfaces formed with MEGAGROUT-101 and exposed to open air must be kept wet for at least 24 hours, covered with wet cloths or polyethylene sheets.

Consumption

Approx. 21.5 kg/m^2/cm of layer thickness, or 2.1 kg for filling 1 l of volume.

MEGAGROUT-101

Packaging

MEGAGROUT-101 is available in 25 kg paper bags.

Shelf life – Storage

12 months from production date if stored in original, unopened packaging, in frost-free and dry conditions.

Remarks

- The temperature during application must be between +5^{0}C to +30^{0}C.
- Material that has started to set must not be softened again with water.
- The product keeps its fluidity for approx. 60 minutes at temperatures between +15^{0}C and +25^{0}C.
- At high temperatures, the product should be stored in a cool place and mixed with cold water in order to obtain the appropriate fluidity for a sufficient period (approx. 60 minutes).
- At low temperatures and whenever early strength development is required, it is recommended to mix the material with lukewarm water and protect it from cold by placing thermal insulating covers around the formwork.
- Due to cement content, the product reacts with water forming alkaline solutions, thus is classified as irritant.
- Please consult the safety instructions written on the packaging before use.

CE

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EN 1504-3

Concrete repair product for structural repair CC mortar (based on hydraulic cement)
DoP No.: MEGAGROUT-101/1210-03

Compressive strength: class R4

Chloride ion content: ≤ 0.05%

Adhesion: ≥ 2.0 MPa

Carbonation resistance: Pass

Elastic modulus: ≥ 20 GPa

Thermal compatibility part 1: ≥ 2.0 MPa

Capillary absorption: ≤ 0.5 kg·m^{-2}·h$^{-0.5}$

Dangerous substances: comply with 5.4

Reaction to fire: Euroclass A1

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Research and Development Department of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore, the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. | Edition: 28.11.2025

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EN 1504-6

DoP No: MEGAGROUT-101 / 1274-01

Anchoring of reinforcing steel bar

Pull-out strength – displacement ≤ 0,6mm at load of 75 kN

Chloride ion content: ≤ 0.05%

Reaction to fire: Euroclass A1

Dangerous substances: comply with 5.3

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