

MEGAGROUT-101

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

Description

High-strength, non-shrinking, cement-based pourable cast 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.

It is classified as a type C grout, according to ASTM C 1107-99 and as a CC R4 mortar for concrete repairs, according to EN 1504-3. Certificate Nr. 2032-CPR-10.11.

Fields of application

MEGAGROUT-101 is suitable for:

- Seating and encasing of machinery.
- Anchoring.
- Grouting of bases and bedplates of precision machinery.

Technical data

Form:	cementitious powder
Color:	grey
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°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 into 3kg of water and mixed well with a low-speed mixer (300 rpm.), until a uniform fluid mass is formed. An additional quantity of up to 0.50 kg of water is added under stirring, until the desired fluidity is achieved. The mixture is then poured, taking care to avoid air entrapment. In every case, it must be ensured that the grout has filled the whole space between the formwork and the existing construction.

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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/m²/cm of layer thickness, or 2.1 kg for filling 1 l of volume.

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 places protected from moisture and frost.

Remarks

- The temperature during application must be between +5°C to +30°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°C and +25°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 of time (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.
- The product contains cement that reacts with water forming alkaline solutions, thus is classified as irritant.

- Consult the directions for safe use and precautions written on the package.



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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



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EN 1504-6

DoP No: MEGAGROUT-101 / 1274-01

Anchoring of reinforcing steel bar

Pull-out strength – displacement $\leq 0,6\text{mm}$ at load
of 75 kN

Chloride ion content: 0,00%

Reaction to fire: Euroclass A1

Dangerous substances: comply with 5.3

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BUILDING CHEMICALS AND MORTARS

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