



MORCEM® GROUT 500

Mortar for filling and precision anchorage. Layers of up to 500 mm



DESCRIPTION

High-strength mortar with self-leveling controlled expansion and no retraction. Medium and thick layers.

ADVANTAGES AND USES

- Compensated retraction.
- Fluid consistency without segregation or bleeding once mixed.
- High initial and final strength.
- Great self-leveling/filling capacity.
- Once hardened, it is waterproof and impervious to oil, grease and all oil products.
- Free of substances that damage concrete and steel.
- Excellent adhesion.
- In confined areas provides good adhesion between concrete / steel. Resists knocks and vibrations.
- Leveling supports and bridges.
- Filling by pouring under support plates ensuring perfect load transmission.
- Filling machinery bedplates.
- Filling by pouring or pumping into cracks and holes confined in the inside of concrete masses.
- Filling and anchoring metal profiles (pillars, pipe supports,...) and prefabricated items.
- Anchorages and bolts.

SUITABLE SUBSTRATES

- The substrate should be clean, firm, rough and free of oil, grease, paints, traces of mold release oils, dust, etc.
- The surfaces should be structurally solid.
- The substrate should be wetted to control suction and prevent sudden water loss, but without leaving puddles on the surface.
- It should have a minimum temperature of +5°C and a maximum temperature of +30 °C.

APPLICATION PROCEDURE

Mixing the mortar:

- Add the product to two thirds of water stipulated. Mix thoroughly adding the remaining water gradually. Do not add more than the recommended amount of water. Mixing can be done manually or mechanically with a mixer at low speed (300 – 600 rpm).

Application:

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MORCEM® GROUT 500

- After mixing the intended hole can be filled. Avoid taking the mixture any distance before applying it, because moving the mixed mortar may cause decanting.
- For the filling, it is advisable to pour the material and help it using a rod.
- For filling under plates, an air outlet should be provided, so that air can come out easily during the filling with the product.
- On large surfaces, vibrating with a rod or ramming into place with hardwood tamping tools and mallet is recommended.
- Application layers: between 5 mm and 200 mm (in confined areas layers of up to 500 mm can be achieved).

Curing:

- Once poured, the product should be protected from the sun, wind, etc.
- It is advisable to cover it using wet sacking for 2 or 3 days.
- The curing process is always essential.
- If filling timber or formwork with the product, you should wait 24 hours to release the mold.

NOTE: For large thicknesses applications over 150 mm, it can be mixed with 6-12 aggregate from Triturados Macael (special aggregate) in a proportion of 20%.

RECOMMENDATIONS

- Do not add more water to the mortar than the recommended amount and do not remix.
- Do not apply at temperatures below 5°C or above 30°C.
- Do not add cement, sand or other substances that may affect the properties of the material.

PACKAGING AND STORAGE

Bags of 25 Kg of powder.
Shelf life: 1 year in sealed original packaging, sheltered from weather conditions and humidity.

TECHNICAL DATA

Statistical data obtained under standard conditions

PRODUCT DATA	
Appearance	GREY powder
Density of paste	Aprox. 2,2 g/cm ³
Granulometry	Dmax. 2 mm
Use	Aprox. 2,2 Kg/m ² per mm of thickness
Water/powder ratio	Aprox. 13%
CURVE RESISTANCE	
Compression: (EN 12190)	
1 day	Approx. 30 N/mm ²
7 days	Approx. 50 N/mm ²
28 days	Approx. 65 N/mm ²
Flexural strenght: (EN 12190)	Approx. 8 N/mm ²
28 days	
Pullout resistance	Displacement < 0,6 mm (Load of 75 KN)
Chloride ion content	≤ 0,05%
Layer thicknesses	5 - 200 mm (up to 500 mm in confined spaces)
Expansion after 28 days	Approx. 0,1%
Adhesion to steel: Ribbed bars	> 15N/mm ²
Adhesion on concrete	≥ 2N/mm ²

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CE MARK

	
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GRUPO PUMA SL Avd. Agrupación Córdoba, Núm.17 14014 (Córdoba) 23 Nº: 210078	
EN-1504-6 MORCEMGROUT 500	
High-strength for filling and anchoring machinery and leveling supports and bridges. Can be applied in layers of 5 to 200 mm.	
Pullout resistance, displacement	≤ 0.6 mm at a load of 75 KN
Chloride ion content	≤ 0.05%
Reaction to fire	A1
Hazardous substances under paragraph	According point 5.3

ENVIRONMENTAL PRODUCT DECLARATION (EPD)

Cement based mortar prepared with aggregates that are supplied close to the production center, which reduces the greenhouse gas emissions that would otherwise arise from their transport. Manufactured in production centers with an Environmental management certified system following ISO 14001 regulation, offering a firm promise of sustainability and respect for the environment.

Cement based mortar with type III ecological label (the most strict) Environmental Product Declaration verified externally by AENOR.

LEGAL DISCLAIMER

The instructions for use are given according to our tests and knowledge and do not imply any commitment by GRUPO PUMA nor free the consumer from the examination and verification of the products for their correct use. Claims must be accompanied by the original packaging to allow a proper traceability.

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