



MORCEM® GROUT 500 PLUS

Very high-strength mortar for filling and precision anchorage. Layers of up to 500 mm



DESCRIPTION

High-strength mortar for filling and anchorage of machinery, leveling supports and bridges, etc. Medium and thick layers.

TECHNICAL CHARACTERISTICS

Two-component product made with hydraulic binders and synthetic resins.

ADVANTAGES AND USES

- Compensated retraction.
- Superfluid consistency without segregation or bleeding once mixed.
- Very 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 it provides good adhesion between concrete / steel. Resists knocks and vibrations.
- Leveling base in joints of bridges.
- Leveling of supports and bridges.
- Anchoring crane rails and crane bridges.
- Reinforcing concrete elements (pillars and beams) by sheathing.
- Filling by pouring under support plates, with high demands, ensuring perfect load transmission.
- Filling bedplates of large machinery: turbines, presses, compressors...

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 the 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:

- 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

CONCRETE REPAIR

MORCEM® GROUT 500 PLUS

RECOMMENDATIONS

PACKAGING AND STORAGE

TECHNICAL DATA

with the product.

- On large surfaces, vibrating with a rod or ramming into place with hardwood tamping tools and mallet is recommended.
- Application layers of between 20 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%.

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

Bags of 25 kg.

Shelf life: 12 months in its sealed original packaging, sheltered from weather conditions and humidity.

(Statistical data obtained under standard conditions)

PRODUCT DATA	
Appearance	GREY powder
Density of paste	Approx. 2.3 g/cc
Granulometry	Dmax. 2 mm
Use	Approx. 2.3 Kg/m ² per mm of thickness
Water/powder ratio	Approx. 15%
CURVE RESISTANCE Compression: (EN 12190)	
1 day	Approx. 35 N/mm ²
7 days	Approx. 55 N/mm ²
28 days	Approx. 70 N/mm ²
Flexural strenght: (EN 12190)	
28 days	Approx. 8 N/mm ²
Pullout resistance	Displacement < 0.6 mm (Load of 75KN)
Chloride ion content	< 0.05%
Layer thicknesses	20 - 200 mm (up to 500 mm in confined spaces)
Expansion after 28 days hardened	Approx. 0.1%
Adhesion to steel: Ribbed bars	> 15 N/mm ²

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CE MARK

	
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GRUPO PUMA ESPAÑA SL Avda. Agrupación Córdoba, 17 14014 Córdoba Nº: 220022	
EN-1504-6 MORCEMGROUT 500 PLUS	
Mortar or very high resistances, for filling and anchoring machines, leveling of supports and bridges. Thickness of the application: 20 to 200 mm.	
Pullout resistance, displacement	≤ 0.6 mm at a load of de 75 KN
Chloride ion content	≤ 0.05%
Reaction to fire	A1

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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