

## Grout 2

Rheoplastic, structural, anti-shrinkage mortar, for precision anchorage



Grout 2 is a high-performance, self-levelling pourable mortar that is fibre-reinforced with Readymesh PM-060 microfibres, with high durability even in aggressive environments, great adhesion on concrete and steel and compensated shrinkage. Aggregates with a maximum size of 2 mm. Ideal for anchoring machinery with subplate casting, anchoring seismic isolators and embedding bars, for repairs and reinforcements that are quite thin (2-6 cm) on reinforced concrete and masonry structures.

**CUSTOMS CODE:** 3824 5090

**COMPONENTS:** Single-component

**APPEARANCE:** Powder

**AVAILABLE COLORS:** Gray

**PACKAGING AND DIMENSIONS:** Bag 25 kg - Pallet: 50 x (Bag 25 kg)

### OBTAINED CERTIFICATIONS AND REGULATIONS



### FEATURES AND BENEFITS

Grout 2 is self-leveling, perfectly pourable, with a maximum aggregate size of 2 mm, and is able to completely fill the most tortuous cavities, normally inaccessible, even if far from the casting point and with a very narrow air gap. The high content of microsilic with pozzolanic activity and the absence of "bleeding", help to generate a very strong adhesion to the substrate and to the foundation or reinforcement iron. Other features are the elimination of plastic shrinkage, the compensation of hygrometric shrinkage, excellent durability to chemical attacks, freeze and thaw cycles, resistance to fats and oils. The exceptional **ANTI-CORROSIVE** and **PROTECTIVE** capacity ON REINFORCEMENTS is achieved thanks to the following properties: • the mix of highly resistant superfine binders, combined with very fine silicas with pozzolanic activity, makes the mortars, at the end of the hardening process, intrinsically impermeable to water; • the strongly alkaline pH (> 12) protects the reinforcing rods from the initiation of corrosion; • the negligible breathability to carbon dioxide gives the hardened mortars very high anti-carbonation characteristics. The combination of these anticorrosive specificities makes the classic passivation treatment of reinforcing bars, preparatory to the casting of the pourable mortar, **NOT NECESSARY**, provided that, between the white metal cleaning operations and the castings of the pourable mortar, it does not elapse too long. time, with the risk of a new start of oxidative processes. Therefore, only if long exposure times are foreseen between the cleaning operations of the iron and the castings of the pourable mortar, it is advisable to treat with passivating grout (Repar Monosteel or Repar Steel), applied with a brush and localized only on d'armor. For the construction of road joints, in works with high vehicle traffic, it is possible to add Grout 2 with 25 kg / m<sup>3</sup> (300 gr / 25 kg bag) of Readymesh MM-150 steel fibers and 1 kg / m<sup>3</sup> (10 gr / bag) of Readymesh PM-060 polypropylene fibers.

### FIELDS OF APPLICATION

Precision anchorage of operating machines: presses, turbines, power supplies, rolling mills, alternators, bridge cranes, metal structures, tracks, etc. Structural adjustments, restorations, drawing and armouring, through injections or castings poured in caisson. Realisation of connecting anchorages through steel bars with diameter and depth consistent with design specifications, through casting in perforations provided for this purpose. Construction of structural road joints.



## ALLOWED SUPPORTS

Concrete - Prefabricated concrete - Mixed walls (bricks and stones) - Rusty reinforcement rods

## PREPARATION OF SUPPORTS

Application surfaces should be clean, free of soiling, crumbling and non-adhering parts, dust, etc., conveniently saturated with water until they reach the condition "saturated with dry surface". An adequate roughening of the surfaces by scarifying, sandblasting etc. is always necessary in order to obtain the maximum adhesion values to the substrate. The optimal values are obtained with high pressure hydro-scarification. Bare the irons undergoing disruptive oxidation or deeply oxidized, removing the rust of the exposed irons (by sandblasting or abrasive brushes).

## MODE OF USE

Insert 2/3 (approximately 2.5 litres per bag) of the total mixing water in the cement mixer, then gradually add the product and the remaining water, mix until a homogeneous lump-free mixture of the desired consistency is obtained. For high anchoring sections Ghiaietto 6.10 should be added (please refer to the appropriate technical data sheet for more information).

## APPLICATION METHODS

Pour out


## TOOL CLEANING


Water

## KEY FEATURES


↔ Max. recommended thickness: 15 cm

↔ Min. recommended thickness: 2 cm


 Pot-life: 30 min

 Temperature of use: +5 / +35 °C

 Maximum diameter of aggregate: 2 mm

 Mix with water: 14 %

 Shelf-life: 12 months

 UV-resistant



## TECHNICAL SPECIFICATIONS

EN 12190

Compressive strength after 1 day > **45 N/mm<sup>2</sup>**

EN 12190

Compressive strength after 28 days > **90 N/mm<sup>2</sup>**

EN 196/1

Flexural strength after 7 days > **11 N/mm<sup>2</sup>**

RILEM-CEB-FIP RC6-78

Resistance to the extraction of the steel bars with improved adhesion > **24 MPa**

EN 13529

Resistance to carbonation **1 mm**

EN 13501-1

Reaction to fire **A1**

EN 12390-8

Water penetration under pressure (5 bar for 72 hours) < **5 mm**

UNI EN 1015-6

Density **2100 kg/m<sup>3</sup>**

Darcy impermeability **10<sup>-10</sup> cm/s**

EN 13687-1 - A/B

Determination of thermal compatibility **2.0 N/mm<sup>2</sup>**

UNI PdR 88:2020

Total recycled content  $\geq$  **3.9 %**

EN 12190

Compressive strength after 7 days > **75 N/mm<sup>2</sup>**

EN 196/1

Flexural strength at 1 day > **7 N/mm<sup>2</sup>**

EN 196/1

Flexural strength after 28 days > **13 N/mm<sup>2</sup>**

EN 13036-4 - CS III

Skid resistance **68 mm**

Resistance to lubricating oils (oil bath for 60 days at 40°C): NO DEGRADES

Water/binder ratio **0.35**

UNI EN 1542

Bonding force **2.32 N/mm<sup>2</sup>**

UNI EN 13057

Capillary absorption **0.45 kg·h<sup>0.5</sup>/m<sup>2</sup>**

EN 1015-17

Chloride content < **0.01 %**

EN 13412

Static elastic modulus **30000 N/mm<sup>2</sup>**

## CONSUMPTION

Approximately 19 kg/m<sup>2</sup> of Grout 2 for every centimetre of thickness to be implemented (approximately 1900 kg per cubic metre).

## STORAGE AND CONSERVATION

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity.

## PHOTO GALLERY



## ADDITIONAL CONTENT



## Additional adhesion parametres

- Adhesion to smooth iron:  $>4.5 \text{ N/mm}^2$
- Adhesion to iron with improved adherence :  $>35 \text{ N/mm}^2$

## WARNINGS AND PRECAUTIONS

Given the self-levelling properties of the product and its self-compacting properties, it is recommended to pay special attention to the vibration step. A excessive zeal in the vibration operation can worsen the aesthetic appearance of the resulting product.

Do not use in the absence of adequate lateral confinement.

Cure the protection and the moist hardening of exposed surfaces.

Adopt casting procedures capable of ensuring the absence of gaps and discontinuities, pouring the mortar from a single part of the casting perimetre to avoid air pockets. The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge.

Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage.

Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: [www.azichem.com](http://www.azichem.com). The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: [www.azichem.com](http://www.azichem.com).

It is forbidden to dispose of the product and/or packaging in the environment.

