



GRT.0321

GROUT 2 HP

Rheoplastic, structural, anti-shrinkage mortar with very high resistance

Customs Code

3824 5090

Packaging

- Bag 25 kg
- Pallet: 50 x (Bag 25 kg)

Application

- Pour out

Family
Grout

Product Lines
• **Infratech**

Components
Single-component

Type
Structural free-flowing cement mortars

Functional Categories
• **Block repair of concrete works with free-flowing mortars**
• **Construction and maintenance interventions on airport runways and quays**
• **Roads and municipal maintenance interventions**
• **Structural maintenance of bridges and viaducts**
• **Structural precision anchoring**

Appearance
Powder

Certifications and legislations



EN 1504-3

Products and systems for the protection and repair of concrete structures - Structural and non-structural repair (R4)

General description

GROUT 2 HP is a pourable, fiber-reinforced mortar, used for structural restoration operations, anchoring of steel bars and strands, reinforced micropiles, tie rods, riveting. The formulation contains very fine high-strength cements, micro-silicas with pozzolanic activity, aggregates in a rational granulometric curve (0.1 ÷ 1.8 mm), special antisegregative additives. The product is mixed with 11% -12% of water, working vigorously and prolonged mechanical mixing. The special formulation of GROUT 2 HP gives the castings mechanical strength, fracture energy, exceptional durability and very high chemical-physical resistance.

General features

GROUT 2 HP has a workability time of about 60-90 minutes, after which the setting process is triggered followed by progressive hardening. The plastic and hygrometric shrinkage is extremely low thanks to the presence of READYMESH PM-060 multifilament synthetic fibers, which give volumetric stability. The performances that make GROUT 2 HP unique are:

- very high compressive mechanical strengths (> 90 MPa at 28 days),
- very high mechanical resistance to bending-traction (> 12 MPa after 28 days),
- excellent durability and resistance to chemical attacks.

Dosage

Approximately 20 kg / m² of GROUT 2 HP for each centimeter of thickness to be created (approximately 2000 kg for each cubic meter).

Fields of application

GROUT 2 HP is used for structural restoration operations, anchoring of steel bars and strands, reinforced micropiles, tie rods, riveting. Particularly suitable in operations where high mechanical performance is required after short curing (compressive strength at 3 days > 60 MPa) and in operations carried out in severe exposure environments (XC - XS - XF), characterized by aggression from sulphates, chlorides and nitrates. The material can also be used for repairs in anchoring areas subject to high stresses.












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Basic features

 Max. recommended thickness: 15 cm	 Maximum diameter of aggregate: 2 mm
 Min. recommended thickness: 2 cm	 Mix with water: 11-12 %
 Pot-life: 30 min	 Shelf-life: 12 months
 Temperature of use: +5 / +35 °C	 UV-resistant
 Available colours Gray	

Technical specifications

Resistenza a compressione dopo 24 ore (UNI EN 12190): > 35 N/mm²

Bonding force (UNI EN 1542): > 2.5 N/mm²

Breaking load longitudinal: 4 N/mm²

Capillary absorption (UNI EN 13057): 0.38 kg•h^{0.5}/m²

Compressive strength after 03 days (UNI EN 12190): > 60 N/mm²

Compressive strength after 28 days (UNI EN 12190): > 90 N/mm²

Density (UNI EN 1015-6): 2250 kg/m³

Flexural strength after 28 days (EN 196-1): > 12 N/mm²

Reaction to fire: A1 _

Setting time: 3-4 h

Static elastic modulus (EN 13412): 30000 N/mm²

Wear resistance (UNI EN 13892-3): 0.8 cm³/50cm²

Tools cleansing

- Water

Applicable on

- Concrete
- Bricks
- Steel

Substrate preparation

The application surfaces must be clean, free of dirt, crumbly and incoherent parts, dust, etc., suitably saturated with water until reaching the condition of "saturated with dry surface". 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).

Instructions for use

It is strongly recommended, for optimal performance of site operations, to use a vertical axis mixer with planetary movement or a double horizontal helicoid. The powder is mixed with drinking water to the extent of 11% - 12%, referring to the total weight of the mortar (about 2.75 liters per 25 kg bag) until a homogeneous mixture is obtained. Mixing time: about 4 minutes with a high efficiency mixer.

The anchoring can be filled with a single screw pump, for mortars. Pumping must be carried out at a controlled speed in order to ensure a low working pressure. In case of restorations, the surface must be protected, after application, by polyethylene sheets or anti-evaporation treatments.

Storage and preservation

Protect from freezing. 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.



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Warnings, Precautions and Ecology

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. 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.

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

GROUT 2 HP is produced/distributed by



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