



GRT.0074

## GROUT CR

Castable, anti-leaching, shrinkage-compensated cement mortar

### Customs Code

3824 5090

### Packaging

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

### Application

- Brick trowel
- Pour out
- Finishing trowel
- Pump
- Spatula



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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**  
• **Structural maintenance of dams, reservoirs, ducts and water ducts**  
• **Structural maintenance of bridges and viaducts**  
• **Structural maintenance of tunnels**  
• **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

Composite, castable, anti-washout, controlled shrinkage cement mortar, superfluid consistency, based on high-resistance cements, superpozzolanic fillers (MICROSIL 90), polymeric modifiers, shrinkage resistant agents, specific additives, calcium silicate mineral fibres, selected silica aggregates.

## General features

- Based on of thickened silica fume
- three-dimensionally reinforced fibre with mineral and synthetic fibres
- Provides high adherence and adhesion
- dimensionally stable (shrinkage-compensated)
- Provides high stability-physical chemical and resistance to chlorides and sulphates
- suitable for underwater castings: it is anti-washout
- high strength in terms of hydrostatic positive and negative thrust

## Dosage

Approximately 20,50 kg/m<sup>2</sup> of GROUT CR for every centimetre of thickness to be implemented (approximately 2050 kg per cubic metre).

## Fields of application

Repair and protective coatings of hydraulic structures, marine and underwater structures, and articles in critical situations: harsh chemical-physical, leaching water, marine atmosphere, etc. Filling of formwork for the containment of cast immersed in sea water.

## Basic features



Highlighted product



Maximum diameter of aggregate:  
5 mm



Mix with water:  
11-12 %



Nonflammable



Pot-life:  
120 min



Shelf-life:  
12 months



Temperature of use:  
+5 / +35 °C



UV-resistant



Available colours  
Gray

# Technical specifications

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<i>Bonding force (UNI EN 1542):</i>	$\geq 2 \text{ N/mm}^2$
<i>Capillary absorption (UNI EN 13057):</i>	$0.15 \text{ kg} \cdot \text{h}^{0.5}/\text{m}^2$
<i>Chloride content (UNI EN 1015-17):</i>	$< 0.01 \%$
<i>Compressive strength after 07 days (UNI EN 12190):</i>	$> 55 \text{ N/mm}^2$
<i>Compressive strength after 28 days (UNI EN 12190):</i>	$> 75 \text{ N/mm}^2$
<i>Density (UNI EN 1015-6):</i>	$2340 \text{ kg/m}^3$
<i>Determination of thermal compatibility (UNI EN 13687-1):</i>	$2.5 \text{ mPa}$
<i>Flexural strength after 07 days (EN 196/1):</i>	$> 7.5 \text{ N/mm}^2$
<i>Flexural strength after 28 days (EN 196/1):</i>	$> 9.5 \text{ N/mm}^2$
<i>pH:</i>	$> 12$
<i>Reaction to fire (EN 13501-1):</i>	A1
<i>Resistance to carbonatation (UNI EN 13295):</i>	$0.5 \text{ mm}$
<i>Resistance to the extraction of the steel bars with improved adhesion:</i>	$> 25 \text{ MPa}$
<i>Skid resistance (UNI EN 13036-4):</i>	$54 \text{ mm}$
<i>Static elastic modulus (EN 13412):</i>	$30000 \text{ N/mm}^2$
<i>Thermal compatibility (UNI EN 13687-1):</i>	$\geq 2 \text{ mPa}$

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## Tools cleansing

- Water

## Applicable on

- Concrete
- Bricks
- Mixed walls (bricks and stones)
- Stone walls
- Steel

## Substrate preparation

In case of underwater application, the installation operations must be carried out within 8-10 hours of cleaning and "fouling" (accumulation and deposits of organic and inorganic particles on product surfaces) removal. 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).

## Instructions for use

Pour 2/3 of total mixture water in the cement mixer, gradually add the product and the remaining water, until a homogeneous mixture of the required consistency is obtained. For sizable filling thicknesses, greater than 60 mm, GHIAIETTO 6.10 (inert washed is selected with a particle size of from 6-10 mm) can be added in a percentage ranging from 20% to 40 %, on the basis of practical requirements.

In some particularly demanding cases in terms of the resistance to the "dry-wet" cycle (for example, for the action of the tides) or for chemical attacks particularly strong, it would be advisable to add, in addition to the gravel, even thickened silica fume (MICROSIL 90), and in a variable amount depending on the thickness and construction-related need, to further improve the waterproofing and the mechanical strength of the product. In these cases, please contact our Technical Service. In the case of casts in water, make sure of perfect product hardening before removal of the formwork.

## Storage and preservation

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](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.

*GROUT CR is produced/distributed by*



Via Giovanni Gentile, 16/A - 46044 Goito (MN), Italy  
info@azichem.com Tel. +39 0376.604185 /604365 Fax +39 0376 604398



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