



## MORCEMCOLOR® PLUS FLEXIBLE

Additive-enhanced and coloured grouting mortar. With anti-fungal and anti-algae preservative and water repellent for joints up to 15 mm.



### DESCRIPTION

Coloured, water-repellent, and additive mortar with mixed binders, characterized by high fineness and plasticity. Designed for sealing joints of up to 15 mm in all types of ceramic renders. Especially suitable for grouting low-porosity tiles (porcelain stoneware) and pools; with anti-fungal and anti-algae preservative.

### TECHNICAL CHARACTERISTICS

High-strength, water-repellent product based on cement, with high-purity aggregates, pigments, and antifungal and anti-algae preservative.

### ADVANTAGES AND USES

- AQUASTOP Effect: Repels surface water from the joint, creating a pearl effect.
- BIOACTIVE Technology: Contains a preservative with fungicidal and algacide properties.
- High resistance to abrasion.
- High hardness.
- Intense colour.
- Easy to clean.
- Very thin texture.
- Little water absorption.
- Crack resistance.
- Suitable for interior and exterior use.
- Water repellent.
- Deformable.
- Compatible with radiant heating floors.

### SUITABLE SUBSTRATES

- Empty joints must be dry and clean throughout their length and depth.
- Before starting the application, PROTECMOR temporary sealer protects porous and non-porous ceramics from potential pigment stains.
- Do not apply on top of gypsum, plaster, anhydrite, or any other substrates with high content of sulphates, or in contact with water or moisten with high content of sulphates.

### APPLICATION PROCEDURE

- Add water (29%-33%) and mix manually or mechanically until getting a consistent paste (not a liquid one)
- Let the paste rest around 5 min. then mix again.
- Working in small areas, fill the joints with a rubber trowel or rechargeable gun, compacting the material

# TILE GROUTS

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### RECOMMENDATIONS

- firmly.
  - The application should be done diagonally across the joints, pressing the mixture onto them, and removing excess material.
  - Allow the material to dry slightly for 20 - 30 minutes.
  - When the paste becomes matte, proceed to clean the surface with a slightly damp, hard sponge.
  - Only when the product has hardened in the joint, polish the surface with a clean, dry cloth to remove any remaining dust.
  - Let it dry for 24 hours before normal transit.
  - If the ceramics get stained, you can use a specific cleaning product if it does not damage the ceramics, taking care not to touch the joints (refer to the product instructions).
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- The successful completion of ceramic installation can only be ensured through careful planning. Therefore, we recommend consulting the current national standards in each country, such as the UNE 138002 standard in Spain, which provides specifications for material selection, proper planning, use, and installation, to achieve the required levels of quality, performance, and durability.
  - It is recommended that the joint spacing between tiles complies with the specifications outlined in section 7.7 of the UNE 138002 standard.
  - For interior areas and swimming pools, the joint width should be  $\geq (1.5 - 3)$  mm, and for exterior areas, the joint width should be  $\geq (3 - 5)$  mm, depending on the type of installation and the larger side of the tile being placed. Do not apply the product under 5°C nor above 35°C temperature.
  - Grouting should be done at least 24 hours after bonding on vertical surfaces and 48 hours after bonding on floors.
  - Do not apply under the risk of frost, rain, heavy wind, or direct sun light.
  - Do not use in expansion joints or those subject to structural movements in the construction.
  - Fill the joints when the floor or render is completely dry.
  - Do not clean the joint with strong acids or similar substances as it may affect its colour.
  - In swimming pools, after grouting, wait at least one week before the first filling of the pool.
  - Joints should be dust-free, free from adhesive residues, and have a uniform depth, at least 2/3 of the total thickness.
  - Do not use on surfaces subject to rising damp.
  - Avoid adding excessive water as it may reduce the final performance of the grout.
  - Do not clean ceramic tiles or mosaic tiles with strong acids or other harsh chemicals, as this may affect the grout colour and reduce its final performance.
  - The ideal pH levels for pool maintenance should be between 7 and 8.2. Lower pH levels can damage the grout, reducing its durability.
  - In pools, ponds, spas, thermal baths, and other high-demand immersion conditions, especially with thermal water, seawater, or saline electrolysis treatment, use a highly acid-resistant and impermeable grout like MORCEMCOLOR EPOXY.
  - In areas subject to frost or extreme temperature fluctuations, MORCEMCOLOR EPOXY is recommended.
  - In the case of highly absorbent tiles or extremely elevated temperatures, before filling the joints, dampen them with clean water by passing a wet sponge over them, avoiding water pooling inside.
  - It is important to respect the mixing water quantity, as an excess can promote the appearance of efflorescence on the grout surface and reduce its final performance.
  - Avoid cleaning with excess water or while the material is still fresh to prevent carbonation and surface tone variations due to pigment dispersion.
  - On floors with radiant heating, apply when the substrate is at room temperature (between 5°C and 30°C).
  - Radiant heating floors must be turned off at least 48 hours in advance and they must be turned on gradually after at least 7 days from the installation of the flooring and the grouting operation.

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### CONSUMPTION ACCORDING TO DIMENSIONS (KG/M²)

Valid Values for 6 mm Thick Tiles

| TILE SIZE  | SEPARATION BETWEEN TILES<br>(JOINT SIZE) |      |      |       |       |
|------------|------------------------------------------|------|------|-------|-------|
|            | 2 mm                                     | 5 mm | 8 mm | 10 mm | 15 mm |
| 15 x 15 cm | 0,27                                     | 0,68 | 1,09 | 1,36  | 2,04  |
| 15 x 20 cm | 0,24                                     | 0,60 | 0,95 | 1,19  | 1,79  |
| 20 x 20 cm | 0,20                                     | 0,51 | 0,82 | 1,02  | 1,63  |
| 25 x 33 cm | 0,14                                     | 0,36 | 0,57 | 0,72  | 1,08  |
| 30 x 40 cm | 0,12                                     | 0,30 | 0,48 | 0,60  | 0,89  |
| 40 x 60 cm | 0,09                                     | 0,21 | 0,34 | 0,43  | 0,64  |
| 45 x 80 cm | 0,07                                     | 0,18 | 0,28 | 0,35  | 0,53  |
| 2 x 2 cm   | 1.3 (calculation for 4 mm joint width)   |      |      |       |       |

$((A+B)/A \times B) \times C \times D \times 0,17 = \text{Kg/m}^2$   
 Where:  
 A = Tile width 1 (cm)  
 B = Tile width 2 (cm)  
 C = Tile Thickness (mm)  
 D = Joint width (mm)

### PACKAGING AND STORAGE

20 Kg plastic-coated bags and 5 Kg polyethylene bags.

Shelf life:

1 year (20 Kg plastic-coated bags)

2 years (5 Kg polyethylene bags)

In sealed original packaging, sheltered from weather conditions and humidity.

# TILE GROUTS

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### TECHNICAL DATA

Statistical data obtained under standard conditions

| Classification according to UNE- EN 13888 CG2 W A |                                          |
|---------------------------------------------------|------------------------------------------|
| APPLICATION AND DATA ASPECT                       |                                          |
| Aspect                                            | White and colour range                   |
| Kneading water                                    | (29 - 33)%                               |
| Application temperature                           | + 5°C to + 35°C                          |
| Mixture duration                                  | 50 - 60 min                              |
| Waiting Time for Finishing                        | 20 - 30 min                              |
| Walkability                                       | 24 hours                                 |
| Service Ready                                     | 24 hours (7 days for tanks and pools)    |
| PERFORMANCE                                       |                                          |
| Flexural Strength after 28 Days                   | ≥ 2.5 N/mm <sup>2</sup> (EN 12808-3)     |
| Compressive Strength after 28 Days                | ≥ 15 N/mm <sup>2</sup> (EN 12808-3)      |
| Flexural Strength after Freeze-Thaw Cycles        | ≥ 2.5 N/mm <sup>2</sup> (EN 12808-3)     |
| Compressive Strength after Freeze-Thaw Cycles     | ≥ 15 N/mm <sup>2</sup> (EN 12808-3)      |
| Shrinkage                                         | ≤ 3 mm/m (EN 12808-4)                    |
| Abrasion                                          | ≤ 1000 mm <sup>3</sup> (UNE- EN 12808-2) |
| Water Absorption after 30 Minutes                 | ≤ 2 g (EN 12808-5)                       |
| Water Absorption after 240 Minutes                | ≤ 5 g (EN 12808-5)                       |
| Approximate performance                           | See table                                |

### 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.

GRUPO PUMA is not responsible, in any case, for the application of its products or constructive solutions carried out by the application company or other parties involved in the process and / or execution of the work, limiting the responsibility of GRUPO PUMA exclusively to the damages directly attributable to the supplied products, individually or integrated in systems, due to failures in their manufacturing process.

In any case, the drafter of the work project, the technical management or the person responsible for the work, or collaterally the application company or other parties involved in the process and / or execution of the work, must ensure the suitability of the products addressing the characteristics of them, as well as the conditions, support and possible pathologies of the work in question.

The values obtained by GRUPO PUMA's products or its constructive solutions that, as the case may be, are determined by the EN standards or any other regulation that applies to it in each case refers exclusively to the conditions specifically stipulated in said regulation and that are referred to, among others, to certain characteristics of the support, humidity and temperature conditions, etc. without being them required in the tests obtained under different conditions, all in accordance with the relevant regulation.