butech
PORCELANOSA Grupo

colorstuk rapid n

colorstuk rapid n is a type CG 2 high-performance, cement-based grouting material as per EN 13888, for groutingfor joints up to 15 mm. Suitable for all kinds of ceramic tiles and natural stone, it is specially recommended for outdoor applications and permanently damp environments.

A high-tech, fine grained colored mortar with fast setting and hardening times for grouting tile joints up to 15 mm. Suitable for all kinds of ceramic tiles and natural stone. Indoors and outdoors.

Recommended use

- Tile joints up to 15 mm.
- Indoor wall and floor tiles.
- Outdoor floors and terraces.
- High traffic floor tiles.
- Floor tiles on radiant heating.
- Pools and damp environments.
- Outdoor wall tiles in facades.

Materials

- Absorbent and non-absorbent ceramic tiles, including porcelain tiles.
- Tiles with mosaic-like patterns.
- Glass mosaic.
- Clay and terracotta tiles.
- Natural stone and marble not prone to staining.

Before applying colorstuk rapid n on a ceramic wall covering not stated in the previous listing, please perform a test or check with butech's Technical Department.

Substrates

All usual substrates for laying ceramic tiles.

Characteristics

- Cement-based, single-component, colored mortar.
- Fine texture mortar for grouting tile joints up to 15 mm.
- Mortar with fast setting and hardening times.
- It prevents efflorescences.
- Excellent mechanical resistance.
- Resistant to heat and UV radiation.
- Frost-resistant.
- Waterproof mortar.
- Anti-mold action.
- Easy to apply and clean.
- Wide color range.

Certifications / Standards

EN 13888 CG2 WA

Instructions for use

Preparing the grout.

colorstuk rapid n is a cement-based grouting material that is to be mixed with water or a liquid additive right before use, and mixed to form a mortar. The following are the instructions for preparing this adhesive:

- Shake bag to ensure all ingredients are mixed together before opening the bags.
- Use clean containers and tools.
- Mix with clean water with a ratio of 22%, 1 - 1,3 liters / 5 kg bag.
- First pour the water into the container, and then add the grouting material slowly.
- Mix with an electric mixer at low rpm (500 rpm) until the mass is creamy, uniform, and without lumps.
- Let stand 2-3 minutes.
- Stir with a hand trowel, and apply.

Do not add water to the mix once the grout has started setting.

Applying the grouting material.

Before starting to seal the installation joints, make sure the adhesive has finished setting and that the moisture on the tile back has been eliminated, especially when it comes to laying mosaics or large format and low absorption tiles with minimal installation joint.

colorstuk **rapid n** is a quick drying grout, so we recommend to use extreme attention with drying times. Do not, under any circumstance, let the grout harden on the wall covering.

We recommend taking the following precautions:

- Check that there are no elements in the installation joints that could interfere with the grouting material. The joints must be clean from bonding material and have a uniform depth throughout their length of at least 3/4 the tile thickness.
- Clean off any dust or dirt remains there might be on the wall covering we are working with.
- In the event of high temperatures, strong air currents, or very absorbent ceramic tiles, wet the joints previously with clean water before applying the grout.
- Protect all elements present in the wall covering that are sensitive to cement mortar attack.
- Do not use metal tools that may scratch the tile surface.

The recommended laying technique is the following:

- Spread the product and press using the hard rubber trowel, until the joints are completely filled; pick the excess with the same trowel, making diagonal movements on the pieces.

- Before cleaning the joints, wait a few minutes until the mortar starts to harden. The wait time may vary depending on the water absorption, room temperature, and aeration.

- Clean off the excess grouting material with a slightly wet fine-finish hard sponge.

- Apply the sponge diagonally to the joint weave, and rinse with clean water as many times as needed. Before using the sponge, rinse as much as possible.

- Go over the joints with a dry cloth, to prevent the presence of moisture from producing hue changes throughout the joint. Always heed the cleaning times.

As general rule, it is not recommended to leave installation joints smaller than 1.5 mm indoors and 5 mm outdoors. There is currently a wide range of spacers and separators that make the work of the ceramic layer easier, but we highly recommend **butech's self-leveling separators** which, in addition to marking the joint width, avoid the appearance of ledges between tiles, and laying defects.

Commissioning.

- Let the mortar set for a minimum of 12 hours before allowing transit on a laid floor. Adverse environmental factors may delay the adhesive setting so if in doubt, let 24 hours pass.

- There are many external factors that can affect the grout color hue: different joint widths, quantity and quality of the mixing and cleaning water, room moisture and temperature, and cleaning system. These factors are out of the supplier's control, and therefore the grout hue cannot be guaranteed.

- Efflorescence (a whitish powder or crust that forms on the surface) can arise with any Portland cement product. Therefore, if a grout that has Portland cement in its composition is used, we cannot guarantee that efflorescences will not form. If that happens, a building site cleaning must be carried out.

Performance

The consumption of grouting material depends on the tile dimensions, joint width, and grouting material density. The mathematical formula for calculating it is the following:

Tile dimensions:

Length	a (mm)
Width	b (mm)
Thickness	c (mm)
Joint width:	j (mm)
Coefficient	d (gr/cm^3)

$$\frac{(A+B) \times C \times J \times 1{,}55}{(A \times B)} = Kg/m^2$$

Table of consumptions per ceramic tile

20 x 20 x 4 Mosaic	600 gr / m^2 and joint mm
50 x 50 x 4 Mosaic	240 gr / m^2 and joint mm
100 x 100 x 6 Tile	192 gr / m^2 and joint mm
200 x 200 x 8 Tile	120 gr / m^2 and joint mm
200 x 316 x 10 Tile	122 gr / m^2 and joint mm
316 x 446 x 10 Tile	81 gr / m^2 and joint mm
316 x 59.6 x 10 Tile	73 gr / m^2 and joint mm
316 x 900 x 10 Tile	64 gr / m^2 and joint mm
316 x 316 x 10 Tile	95 gr / m^2 and joint mm
446 x 446 x 10 Tile	67 gr / m^2 and joint mm
446 x 66 x 10 Tile	57 gr / m^2 and joint mm
596 x 596 x 10 Tile	50 gr / m^2 and joint mm
596 x 1200 x 10 Tile	38 gr / m^2 and joint mm
800 x 800 x 10 Tile	38 gr / m^2 and joint mm
193 x 1200 x 10 Tile	90 gr / m^2 and joint mm
180 x 659 x 10 Tile	106 gr / m^2 and joint mm

Cleaning and maintenance

Before applying the grouting material, and in order to avoid later problems, we recommend consulting the supplier's technical data sheet for the type of wall covering used, and check:

- Presence of unevenness or micropores on the tile surface, which may difficult cleaning the grout. In case of doubt, we recommend performing a preliminary test.
- Presence of decorations on the tile surface, sensitive to grouts.
- Chemical resistance to alkaline products such as cement products.
- Chemical resistance to acid construction cleaners.
- Resistance to cement mortar scratches. In case of doubt, we recommend performing a preliminary test.

Clean up any remaining mortar before it hardens. Be extremely cautious with non-slip floors, absorbent stone, or tiles with relief surface.

In case of mortar stains, use **acid net** construction debris cleaner. We recommend rinsing the wall covering well after using **acid net** , and checking that there are no water or cleaner remains on the joint surface. In any case, it is advisable to carry out a previous test.

Once the work is carried out, clean the tool with plenty of water before the remains harden.

Check the supplier's maintenance instructions for the type of wall covering used.

Conservation

- Conservation of grouting material in its original container varies, depending on the type of packaging used:

  - 24 months in 5 kg aluminum paper package.
  - 12 months in 25 kg paper package.

- Store in a dry place, covered and protected from weather, moisture, and direct sunlight. Product according to the requirements of Directive 2003/53/EC and Regulation No 1907/2006/CE Appendix XVII

Safety and hygiene

Contains hydraulic binders which can produce a slightly irritant alkaline reaction when in contact with sweat or other body fluids. Safety data sheets available to the professional user who requests them.

Additional instructions

- Shake bag to ensure all ingredients are mixed together before opening the bags.

- We only recommend applying **colorstuk rapid n** with a hard rubber trowel. Generally speaking, we do not recommend the use of soft rubber trowels or any kind of metal tool.

- **colorstuk rapid n** is a grouting material for professional use. Follow scrupulously all instructions for preparing and applying the adhesive.

- Using a larger amount of water when mixing the grouting material reduces the mechanical performance, and produces changes in the joint color.

- Do not use **colorstuk rapid n** in joints wider than 15 mm. It may cause the appearance of fissures, cracking, or puncturing in the grout

- Do not use **colorstuk rapid n** in joints less than 1 mm wide. We cannot guarantee that the grouting material will penetrate throughout the full length and thickness of the installation joint.

- Working times depend on the wind, humidity, and temperature workplace conditions, so the working times specified on this sheet may vary regarding those of the place where the work is being carried out.

- Protect from rain and frost at least during the first 24 h.

- Do not apply when the temperature is below 5 ° C or higher than 35 ° C.

- Use extreme care when laying absorbent non-glazed tiles, marble, and other natural stones.

- Do not apply in installations where special mechanical or chemical resistance is needed. In these cases, use **epotech**.

- Never apply in movement joints, whether they are structural, perimeter, or partition.

- The layout, width, and construction details of the perimeter and intermediate movement joints, as well as the materials to be used, should be included in the ceramic tile laying design.

- Heed the structural joints present in the substrate.

- Make movement perimeter joints in corners, floor level changes, and height differences in material changes.

- As a general rule, make intermediate movement joints that delimit areas as square as possible, 16-25 m^2 outdoors, and 50 m^2 -70 m^2 indoors. They shall have a minimum width of 8 mm.

- The technical information contained in this technical data sheet has been collected from approved laboratory tests and under the conditions indicated by the corresponding standards.

- For more information about this product, check with **butech's Technical Department**.

Technical Sheet Conditions

- This is not a finished product technical sheet. It belongs to a grouting material which, together with other products and materials, configures a ceramic tile laying system. Instructions in this technical sheet have been written based on our experience and technical expertise, but they have to be only considered as general recommendations which, together with those for the rest of the products in the system, guide the laying professionals in their job.

- As it is not possible to know all the features and conditions of a building job, professionals must consider it and, if deemed appropriate, perform a previous test to confirm whether the product is suitable for the job.

- The technical sheet cannot reflect all the applications and conditions entailed in the use of a material, so, in situations not described in this sheet, we recommend to perform a previous test and refer to our technical department.

- This sheet has been updated in June, 2021.

Technical data

Appearance	Colored fine powder
Hazard	Irritant (see material safety data sheet)
Flammability	No
Storage time in 5 kg bag	24 months in a dry place
Water proportion	22%
Specific weight of the powder	1.3 g/cm^3
Specific weight of the mixture	1.9 g/cm^3
Application temperature	5 ° C to 35 ° C
Durability	≈ 30 minutes
Wait for grouting in floors	24-48 h
Wait for grouting in floors laid traditionally	15 days
Wait for grouting in wall coverings	12-24 h

Abrasion		
Resistance	EN 12808-2	≤ 1000 mm^3
Dry flexural strength	EN 12808-3	3.5 N/mm^2
Flexural strength (freeze/thaw)	EN 12808-3	3.5 N/mm^2
Dry compression	EN 12808-3	15 N/mm^2
Compression (freeze/thaw)	EN 12808-3	15 N/mm^2
Water absorption		
After 30 min.	EN 12808-5	≤ 2 gr
After 240 min	EN 12808-5	≤ 5 gr
Shrinkage	EN 12808-4	≤ 2 mm/m
Heat resistance		-30 ° C to 80 ° C

Data obtained in standard laboratory conditions, at 23 °C and 50% relative humidity.

References

SAP		Presentation	Europallet
100236463	blanco	bag 5 kg	400 kg/pallet
100275760	perla	bag 5 kg	400 kg/pallet
100236834	gris	bag 5 kg	400 kg/pallet
100236808	beige	bag 5 kg	400 kg/pallet
100236794	marfil	bag 5 kg	400 kg/pallet
100236833	caramelo	bag 5 kg	400 kg/pallet
100236809	marron	bag 5 kg	400 kg/pallet
100236823	tabaco	bag 5 kg	400 kg/pallet
100236824	moka	bag 5 kg	400 kg/pallet
100236464	manhattan	bag 5 kg	400 kg/pallet
100236449	cemento	bag 5 kg	400 kg/pallet
100236481	antracita	bag 5 kg	400 kg/pallet
100236475	negro	bag 5 kg	400 kg/pallet

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