colorstuk especial n

colorstuk especial n is a type CG2WA, very fine grain grouting material as per EN 13888, for grouting joints up to 4 mm. Its formula includes ultrafine aggregates, which make it specially recommended for tiles with a glaze sensitive to scratching.

A high-tech, fine grained colored mortar for grouting tile joints up to 4 mm. Specially recommended for grouting rectified ceramic tiles sensible to scratching.

Recommended use

- Tile joints up to 4 mm.
- Ceramic tiles with low hardness glaze as per Mohs scale.
- Indoor wall coverings. Specially recommended for rectified tiles.
- Indoor floor tiles, including public buildings.

In the following applications, replace mixing water with cl-stuk **additive**.

- Outdoor floor and wall tiles.
- Floor tiles on radiant heating.
- Pools and damp environments.

Materials

- Absorbent and non-absorbent ceramic tiles, including porcelain tiles.
- Ceramic tiles with special finishes.
- Glass mosaic.
- Natural stone and marble not prone to staining.

In the following applications, replace mixing water with cl-stuk **additive**.

- Wall tiles with mosaic-like patterns.
- DQS slabs and other kinds of marble agglomerate

Before applying colorstuk especial 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.
- Ultrafine aggregates formula.
- Fine texture mortar for grouting tile joints from 0 to 4 mm.
- Easy to apply and clean.
- Resistant to heat and UV radiation.
- Frost-resistant.
- Wide special colors range.

Certifications / Standards

EN 13888 CG2WA

Instructions for use

Preparing the grout.

colorstuk especial 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 32%; 0.64 liters / 2 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

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 24 hours before allowing transit on a laid floor. Adverse environmental factors may delay the adhesive setting so if in doubt, let 36 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	640 gr / m^2 and joint mm
50 x 50 x 4 Mosaic	256 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	128 gr / m^2 and joint mm
200 x 316 x 10 Tile	131 gr / m^2 and joint mm
316 x 446 x 10 Tile	87 gr / m^2 and joint mm
316 x 59.6 x 10 Tile	77 gr / m^2 and joint mm
316 x 900 x 10 Tile	68 gr / m^2 and joint mm
316 x 316 x 10 Tile	101 gr / m^2 and joint mm
446 x 446 x 10 Tile	72 gr / m^2 and joint mm
446 x 66 x 10 Tile	61 gr / m^2 and joint mm
596 x 596 x 10 Tile	54 gr / m^2 and joint mm
596 x 1200 x 10 Tile	40 gr / m^2 and joint mm
800 x 800 x 10 Tile	40 gr / m^2 and joint mm
193 x 1200 x 10 Tile	96 gr / m^2 and joint mm

180 x 659 x 10 Tile 113 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:

1. 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.

2. Presence of decorations on the tile surface, sensitive to grouts.

3. Chemical resistance to alkaline products such as cement products.

4. Chemical resistance to acid construction cleaners.

5. 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 the construction debris cleaner acid net. 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

24 months in its original container and protected from moisture and the weather. Store in a dry place, covered and protected from 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.

- The grouting material **colorstuk** especial n, has been especially developed for tiles with scratch-sensitive mosaics. However, decorations or special designs may involve glazings that are even softer than this grouting material. Thus, in case of doubt, we recommend to always carry out a previous test before applying.

- We only recommend applying **colorstuk** especial 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** especial 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** especial n in joints wider than 4 mm. It may cause the appearance of fissures, cracking, or puncturing in the grout

- 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.

- In outdoor floors and walls, presence of underfloor heating, high traffic, wet environments or swimming pools, replacing the mixing water with **cl-stuk** latex is recommended.

- 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 December, 2020.

Technical data

Appearance	Colored fine powder
Hazard	Irritant (see material safety data sheet)
Flammability	No
Storage time	24 months in a dry place
Water proportion	32%
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	≈ 80 min
Wait for grouting in floors	24 - 36 h
Wait for grouting in floors laid traditionally	15 days
Wait for grouting in wall coverings	24 - 36 h

Abrasion		
Resistance	EN 120008-2	≤ 1000 mm^3
Dry flexural strength	EN 120008-3	2.5 N/mm^2
Flexural strength (freeze/thaw)	EN 120008-3	2.5 N/mm^2
Dry compression	EN 120008-3	15 N/mm^2
Compression (freeze/thaw)		15 N/mm^2
	EN 120008-3	
Water absorption		
After 30 min.	EN 120008-5	≤ 2 gr
After 240 min	EN 128008-5	≤ 5 gr
Shrinkage	EN 120008-4	≤ 2 mm/m
Heat resistance		-30 ° C to 80 ° C

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

References

B24302054	100238251	dark	bag 2 kg	432 kg/pallet
B24302056	100238261	moka	bag 2 kg	432 kg/pallet
B24302057	100238235	nacare	bag 2 kg	432 kg/pallet
B24302059	100238229	vainilla	bag 2 kg	432 kg/pallet
B24302055	100238236	white	bag 2 kg	432 kg/pallet
B24302058	100238260	graphite	bag 2 kg	432 kg/pallet
B21522231	100204245	ash	bag 2 kg	432 kg/pallet
B21522232	100204254	beech	bag 2 kg	432 kg/pallet
B21522235	100204255	oak	bag 2 kg	432 kg/pallet
B21522234	100204261	honey	bag 2 kg	432 kg/pallet
B21522233	100204260	doussie	bag 2 kg	432 kg/pallet
B21522236	100204554	antracita	bag 2 kg	432 kg/pallet
B24302052	100234451	elm	bag 2 kg	432 kg/pallet
B24302053	100234433	wenge	bag 2 kg	432 kg/pallet
B51201055	100243271	maple	bag 2 kg	432 kg/pallet
B51201054	100243281	iroko	bag 2 kg	432 kg/pallet

butech building technology, S.A.U.

Carretera Villarreal - Puebla de Arenoso (cv-20) km 2.5 - 12540 Villarreal - Castellón - Spain.

Apartado de correos: 297 - Telephone (+ 34) 964 53 62 00 - Fax (+ 34) 964 53 00 34 - butech@butech.es - http://www.butech.net

butech
PORCELANOSA Grupo

SAP			Presentation	Europallet
100238236	white		bag 2 kg	432 kg/pallet
100238229	vainilla		bag 2 kg	432 kg/pallet
100204255	oak		bag 2 kg	432 kg/pallet
100204261	honey		bag 2 kg	432 kg/pallet
100243281	iroko		bag 2 kg	432 kg/pallet
100234451	elm		bag 2 kg	432 kg/pallet
100243271	maple		bag 2 kg	432 kg/pallet
100204254	beech		bag 2 kg	432 kg/pallet
100238261	moka		bag 2 kg	432 kg/pallet
100234433	wenge		bag 2 kg	432 kg/pallet
100204260	doussie		bag 2 kg	432 kg/pallet
100238235	nacare		bag 2 kg	432 kg/pallet
100238260	graphite		bag 2 kg	432 kg/pallet
100204245	ash		bag 2 kg	432 kg/pallet
100204554	antracita		bag 2 kg	432 kg/pallet
100238251	dark		bag 2 kg	432 kg/pallet

butech building technology, S.A.U.
Carretera Villarreal - Puebla de Arenoso (cv-20) km 2.5 - 12540 Villarreal - Castellón - Spain.
Apartado de correos: 297 - Telephone (+ 34) 964 53 62 00 - Fax (+ 34) 964 53 00 34 - butech@butech.es - http://www.butech.net