MAPEI

Keracolor GG

SGBPDC-12-084

High performance, polymer-modified, cement-based grout for joints from 4 to 15 mm

CLASSIFICATION IN COMPLIANCE WITH EN 13888

Keracolor GG is an improved (2) cementitious (C) grout (G), with reduced water absorption (W) and high abrasion resistance (A), classified as CG2WA.

WHERE TO USE

Grouting interior and exterior floors and walls in all types of ceramic tiles (single fired, double fired, klinker, porcelain tiles, etc.), terracotta, facebrick and stone material (natural stone, marble, granite, agglomerates, etc.).

Some application examples

- Grouting façades, balconies, terraces and swimming pools.
- Grouting floors with a rustic finish (terracotta, enamelled porcelain, antiqued marble, klinker, single fired tiles).
- Grouting floor and wall ceramic tiles in interiors.
- Grouting ceramic tiled industrial flooring where resistance to chemicals is not required (garages, warehouses, etc.).

TECHNICAL CHARACTERISTICS

Keracolor GG is a mixture of cement, graded aggregates, synthetic resins, special additives and pigments.
The following features are obtained when mixed with the right water ratio and used correctly:

- good compressive and flexural strength, and good resistance to freeze/thaw cycles, therefore good durability;
- good abrasion resistance;
- low shrinkage, therefore absence of cracks and fissures;

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Grouting a terracotta tile floor with float

Grouting a ceramic tile floor with a sponge trowel

Grouting an external wall with a float

• good resistance to acids with pH > 3;
• excellent cost-quality ratio.

When mixing **Keracolor GG** with **Fugolastic**, a special synthetic resin based polymeric additive, the final characteristics are improved, achieving adequate resistance even under harsh conditions (grouting façades, swimming pools, bathrooms, floors subjected to heavy traffic).
For further information consult the **Fugolastic** Technical Data Sheet.

RECOMMENDATIONS

- Do not use **Keracolor GG** with cement or any other products. Never add water to the mixture that has begun to set.
- Never mix **Keracolor GG** with salt or dirty water.
- Use the product in temperatures between +5°C and +35°C.
- The amount of mixing water must be precisely measured. An excess of water could induce the appearance of a whitish coat over the surface (efflorescence). If mixtures with different mix ratios are prepared, different colour tones could result. Efflorescence over the surface is due to the formation of calcium carbonate and could also be caused by moisture residue contained in adhesives, not fully hydrated grouts, in substrates not adequately dried, or in substrates not adequately protected from rising damp.
- After having filled the joints with the mixture, do not strew the grouts with **Keracolor GG** powder to avoid an uneven colour.
- When resistance to acids or hygienic finish is required, use a suitable anti-acid grout (e.g. **Kerapoxy**).
- Expansion joints and fraction joints in floors and walls should never be filled with **Keracolor GG**, but with the appropriate flexible MAPEI sealants.
- Occasionally the surface of some ceramic tiles or stone materials are rough or contain micro-porosities. It is recommended to make a sample test to verify cleanability and when necessary, apply a protective treatment over the surface, but avoiding its penetration into the joints.

APPLICATION PROCEDURE

Preparing the joints

Before grouting the joints, wait until the installation mortar or the adhesive has completely hardened. Verify that the waiting time indicated on the relevant Technical Data Sheets has passed.
The joints must be clean, free of dust and emptied to at least 2/3 of the tile thickness. The excess adhesive or mortar should be removed while still fresh.
Wet the joints with clean water when using very porous ceramic tiles in high temperatures and in the presence of wind.

Preparing the mix

While stirring, pour **Keracolor GG** into a clean, rust-free container containing 18-20% by weight of clean water or **Fugolastic** (if required in the application).
When grouting floors, the mixture can be made thinner by adding more water (approx. 24% by weight).
Mix, preferably with a low speed mixer to avoid excess formation of air bubbles, to a smooth consistency.
Wait 2-3 minutes and briefly re-stir before use. Use the mixture within 2 hours of preparation.

Applying the grout

Fill the joints well with **Keracolor GG** using the appropriate MAPEI trowel or rubber float, making sure the joints are completely compacted, with no unevenness. Remove excess **Keracolor GG**, while still fresh, from the surface moving the trowel or float diagonally across the joints.

Finishing

When the mixture loses its plasticity and becomes opaque, usually after 10-20 minutes, clean excess **Keracolor GG** with a damp hard cellulose sponge (e.g. MAPEI sponge) working diagonally to joints. Rinse the sponge frequently using two separate buckets of water: one to remove the excess mixture from the sponge and the other with clean water for rinsing out the sponge. This can also be carried out with a power float.
To help remove the hardened product from the tiles, use a dampened Scotch-Brite® pad or a disc-type power float with special abrasive-felt discs.
If cleaning is carried out too soon (when the mixture is still plastic), the joints may be partially emptied, therefore more subject to colour variations. On the other hand, if the grout has already hardened, it is necessary to clean the surface mechanically, which could scratch the surface of the tiles.
When applying **Keracolor GG** in extremely hot, dry or windy climates, it is recommended to wet the joints after several hours.
The wet curing always improves its final performance.
Final cleaning of a any powdery haze of **Keracolor GG** from the surface is carried out with a clean dry cloth.
After the final cleaning, if the surface of the floors or walls are still covered with excess **Keracolor GG** due to poor application technique, an acid cleaner can be used (e.g. **Keranet**), following the relevant instructions, at least 10 days after grouting the joints. Use **Keranet** only on acid-resistant surfaces and never on marble or lime materials.

SET FOR LIGHT FOOT TRAFFIC

Floors are set for light foot traffic after approx. 24 hours.

READY FOR USE

Floors are ready for traffic after 7 days.
Basins and swimming pools can be filled 7 days after grouting.

Cleaning

Clean tools and containers with plenty of water before **Keracolor GG** hardens.

CONSUMPTION

The coverage of **Keracolor GG** varies depending on the width of the joints, the size and thickness of the tiles.
Some examples of coverage in kg/m^2 are shown in the chart.

PACKAGING

25 kg bags, 4x5 kg boxes, depending on the colour.

TECHNICAL DATA (typical values) In compliance with:	– European EN 13888 as CG2WA – ISO 13007-3 as CG2WA
PRODUCT IDENTITY	
Type:	granular powder
Colour:	17 colours from the MAPEI range
Bulk density (kg/m³):	1300-1500
Dry solids content (%):	100
EMICODE:	EC1 R Plus - very low emission
APPLICATION DATA at +23°C and 50% R.H.	
Mixing ratio:	100 parts **Keracolor GG** with 18-20 parts water by weight
Consistency of mix:	thin paste
Density of mix (kg/m³):	2000
pH of mix:	approx. 13
Pot life:	approx. 2 hours
Application temperature:	from +5°C to +35°C
Grouting after installation: **– on walls bonded with normal setting adhesive:** **– on walls bonded with fast setting adhesive:** **– on walls with mortar:** **– on floors bonded with normal setting adhesive:** **– on floors bonded with fast setting adhesive:** **– on floors with mortar:**	 4-8 hours 1-2 hours 2-3 days 24 hours 3-4 hours 7-10 days
Waiting time for finishing:	10-20 minutes
Set for light foot traffic:	24 hours
Ready for use:	7 days
FINAL PERFORMANCES	
Flexural strength after 28 days (EN 12808-3): **Compressive strength after 28 days (EN 12808-3):** **Flexural strength after freeze-thaw cycles (EN 12808-3):** **Compressive strength after freeze-thaw cycles (EN 12808-3):** **Abrasion resistance (EN 12808-2):** **Shrinkage (EN 12808-4):** **Water absorption after 30 min. (EN 12808-5):** **Water absorption after 240 min. (EN 12808-5):**	In compliance with European norm EN 13888 as CG2WA
Resistance to moisture:	excellent
Resistance to ageing:	excellent
Resistance to solvents, oils and alkali:	excellent
Resistance to acids:	good if pH > 3
Resistance to temperature:	from –30°C to +80°C

Wall finishing with a sponge

Floor finishing with a machine

Cleaning a singles-fired tile floor with a sponge brush

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An example of a grouted antiqued marble stone floor

	100 WHITE	110 MANHATTAN 2000	111 SILVER GREY	112 MEDIUM GREY	113 CEMENT GREY	114 ANTHRACITE	130 JASMINE	131 VANILLA	132 BEIGE 2000	160 MAGNOLIA	142 BROWN	141 CARAMEL	140 CORAL RED	145 TERRA DI SIENA	144 CHOCOLATE	170 CROCUS BLUE	181 JADE GREEN
Keracolor GG	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

N.B.: Due to the printing processes involved, the colours should be taken as merely indicative of the shades of the actual product

CONSUMPTION TABLE DEPENDING ON THE SIZE OF THE TILE AND WIDTH OF THE JOINTS (kg/m²)

Size of the tile (mm)	Width of the joint (mm)			
	3	5	8	10
75 x 150 x 6	1,0			
100 x 100 x 6	1,0			
100 x 100 x 10	1,6			
100 x 200 x 6	0,8			
100 x 200 x 10	1,2	2,0	2,4	
150 x 150 x 6	0,7			
200 x 200 x 8	0,7			
120 x 240 x 12	1,2	2,0	2,4	
250 x 250 x 12	0,8	1,3	1,6	
250 x 250 x 20	1,3	2,1	2,6	3,9
250 x 330 x 8	0,5	0,8	0,9	
300 x 300 x 8	0,5	0,7	0,9	
300 x 300 x 10	0,6	0,9	1,1	
300 x 300 x 20	1,1	1,7	2,2	3,2
300 x 600 x 10	0,4	0,7	0,8	
330 x 330 x 10	0,5	0,8	1,0	
400 x 400 x 10	0,4	0,7	0,8	
450 x 450 x 12	0,5	0,7	0,9	
500 x 500 x 12	0,4	0,6	0,8	
600 x 600 x 12	0,4	0,5	0,7	

CONSUMPTION CALCULATION FORMULA:

$$\frac{(A + B)}{(A \times B)} \times C \times D \times 1.6 = \frac{kg}{m^2}$$

A = length of tile (in mm)
B = width of the tile (in mm)
C = thickness of the tile (in mm)
D = width of the joint (in mm)

COLOURS

Keracolor GG is available in 17 colours from the MAPEI range (please refer to the colour samples).

STORAGE

Keracolor GG can be stored 12 months in a dry place in original packaging.
The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH) - All. XVII, item 47.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND INSTALLATION

Keracolor GG contains cement that when in contact with sweat or other body fluids causes irritant alkaline reaction and allergic reactions to those predisposed. It can cause damage to eyes. It is recommended to use protective gloves and goggles and to take the usual precautions for handling chemicals. If the product comes in contact with the eyes or skin wash immediately with plenty of water and consult a doctor.
For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.

Our Commitment To The Environment
MAPEI products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.

All relevant references for the product are available upon request and from www.mapei.com

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