

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

# **CLASSIFICATION IN COMPLIANCE WITH ISO 13007**

**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:



Keracolor GG



Grouting a terracotta tile floor with float



Grouting a ceramic tile floor with a sponge trowel



Grouting an external wall with a float

- 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;
- good resistance to acids with pH > 3;
- excellent cost-performance 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.
- Do not blend different colours of grout together as there is a risk of colour inconsistency and non-uniform final shade once the grout has 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, 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.

Dampen the joints with clean water when using porous ceramic tiles.

#### Preparing the mix

Before mixing the grout with water, dryblend the product to avoid color variations in the finished grout, which may arise from pigment settling during transport. If two or more bags are to be used, all of the contents should be dry-blended together. 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 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.

TECHNICAL DATA (typical values) In compliance with:	- European EN 13888 as CG2WA - ISO 13007-3 as CG2WA			
PRODUCT IDENTITY				
Туре:	granular powder			
Colour:	9 colours from the MAPEI range			
Bulk density (kg/m³):	1,300-1,500			
Dry solids content (%):	100			
EMICODE:	EC1 R Plus - very low emission			
APPLICATION DATA at +23°C and 50% R.H.				
Mixing ratio:	100 parts of <b>Keracolor GG</b> with 18-20 parts of water by weight			
Consistency of mix:	thin paste			
Density of mix (kg/m³):	2,000			
pH of mix:	approx. 13			
Pot life of mix:	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 laid with mortar:  - on floors bonded with normal setting adhesive:  - on floors bonded with fast setting adhesive:  - on floors laid 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:  Compressive strength after 28 days:  Flexural strength after freeze-thaw cycles:  Compressive strength after freeze-thaw cycles:  Abrasion resistance:  Shrinkage:  Water absorption after 30 min.:  Water absorption after 240 min.:	In compliance with ISO 13007.3 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			

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 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. Please refer to the product calculator to estimate consumption rates at www.mapei.com. Some examples of coverage in kg/m² are shown in the chart.

#### **PACKAGING**

20 kg bags.

#### **COLOURS**

**Keracolor GG** is available in 9 colours from the MAPEI range (please refer to the colour samples).

#### **STORAGE**

**Keracolor GG** can be stored for 12 months when kept in the original packaging. Store in a dry elevated area. Keep out of the reach of children.

## SAFETY INSTRUCTIONS FOR THE PREPARATION AND INSTALLATION

**Keracolor GG** contains cement, that when in contact with sweat or other body fluids, causes an irritant alkaline reactions and allergic reactions to those predisposed. It can cause damage to eyes.

During use, wear protective gloves and goggles and take the usual precautions for handling chemicals. If the product comes in contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.

For further and complete information about the safe use of our product please refer to the latest version of our Safety Data Sheet available from our website at www.mapei.com.au.

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.au

#### **LEGAL NOTICE**

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

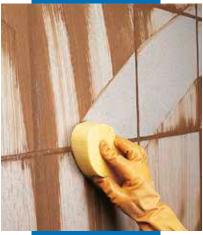
The most up-to-date TDS can be downloaded from our website www.mapei.com.au

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.



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.

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



Wall finishing with a sponge



Floor finishing with a machine



Cleaning a singles-fired tile floor with a sponge brush

9-1	100 WHITE	111 SILVER GREY	110 MANHATTAN 2000	112 MEDIUM GREY	113 CEMENT GREY	114 ANTHRACITE	120 BLACK	130 JASMINE	<b>132</b> BEIGE 2000
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)								
O'co of the tile (cos)	Width of the joint (mm)							
Size of the tile (mm)	4	5	8	10				
75x150x6	0.8	1.0						
100x100x7	0.9	1.1						
100x100x9	1.2	1.4						
150x150x6	0.5	0.6						
200x200x7	0.4	0.6						
200x200x9	0.6	0.7						
300x300x10	0.4	0.5						
300x300x20	0.9	1.1						
300x600x10	0.3	0.4						
400x400x10	0.3	0.4						
500x500x10		0.3						
600x600x10		0.3						
750x750x10		0.2						
100x600x9		0.8						
150x600x9		0.6						
150x900x9		0.6	0.9					
150x1200x10		0.6	1.0					
225x450x9		0.5						
225x900x9		0.4	0.6					
250x900x9		0.4	0.6					
250x1200x10		0.4	0.6					
600x600x5		0.1	0.2					
600x600x3		0.1	0.1					
1000x500x5			0.2					
1000x500x3			0.1					
1000x1000x5				0.2				
1000x1000x3				0.1				
3000x1000x5				0.1				
3000x1000x3				0.1				

## 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)

# Keracolor GG





An example of a grouted antiqued marble stone floor

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