

KERACOLOR SF

Super-fine, white cementitious mortar for grouting
tile joints of up to 4 mm



CLASSIFICATION IN COMPLIANCE WITH EN 13888

Keracolor SF is a class CG2WA improved (2) cementitious (C) mortar for grouts (G), with reduced water absorption (W) and high abrasion resistance (A).

WHERE TO USE

Keracolor SF is used for internal and external grouting of floors and finishes in all types of ceramic (single-fired, double-fired, klinker, porcelain, etc.), stone material (natural stone, marble, granite, agglomerates, etc.), and glass and pre-finished marble mosaic.

Some application examples

Grouting narrow tile joints in all types of tiles on floors and on walls in buildings for domestic use.

Grouting tile joints in glass and pre-finished marble mosaic.

Grouting joints in finishes with a particularly smooth and shiny surface (polished porcelain, polished marble, etc.).

TECHNICAL CHARACTERISTICS

Keracolor SF is made up of a blend of cement, graded aggregates, synthetic resins, special admixtures and pigments. **Keracolor SF** is characterised by a special rheological behaviour, which makes it particularly suitable for grouting narrow tile joints.

It has a very low emission of volatile organic compounds and is classified EMICODE ECT Plus by GEV.

When mixed with water in the proportions recommended and correctly applied, it forms a grouting mortar with the following characteristics:

- good compressive and flexural strength and good resistance to freeze/thaw cycles, and therefore excellent durability;
- smooth, compact finished surface with a very fine grain structure, with low water absorption and therefore easy cleaning;
- very good resistance to abrasion;
- low shrinkage rate, therefore free of cracks and fissures;
- good resistance to acids with pH > 3;
- excellent cost-performance ratio.

By mixing **Keracolor SF** with **Fugolastic**, a special synthetic resin-based polymeric admixture, its final characteristics are further improved and it reaches a level of strength which makes it suitable for even the most severe in-service conditions (grouting façades, swimming pools, bathrooms and even floors subject to intense traffic). **Keracolor SF** together with **Fugolastic** admix may also be used for grouting joints in marble to be polished after laying.

For further information, please refer to **Fugolastic** Technical Data Sheet.

RECOMMENDATIONS

- Do not mix **Keracolor SF** with cement or other products, and never add water once it has started 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 SF** with salt-water or dirty water.
- Use the product at a temperature of between +5°C and +35°C.
- The water used for mixing the product must be very carefully dosed. Too much mixing water and residual humidity in the adhesive or mortar which have not completely hydrated, or in substrates which have not dried sufficiently or which are not adequately protected against rising damp, may cause unsightliness due to the formation of salts on the surface.
- Expansion and distribution joints on walls and floors must never be filled with **Keracolor SF**.
- In the case of tiles or slabs of stone material which have micro-porosity or a rough surface, carry out a preliminary test on a small piece to check whether it may be easily cleaned. If necessary, treat the surface with a protective treatment to the surface, ensuring that it does not run into the tile joints.
- Do not use **Keracolor SF** to grout tile joints wider than 4 mm (use **Keracolor FF** or **Keracolor GG**).
- With particularly absorbent tiles and thin tile joints, we recommend that the finish is dampened before grouting.

APPLICATION PROCEDURE

Preparing the joints

Before grouting the joints, wait until the installation mortar or the adhesive has completely set. Make sure that the waiting times indicated in the Technical Data Sheets are strictly adhered to. The joints must be clean, free from dust and empty down to at least 2/3 of the thickness of the tiles. Any adhesive or mortar which has seeped into the joints while laying the tiles must be removed whilst still fresh.

With particularly absorbent tiles, or in the case of high temperatures or in windy conditions, dampen the joints with clean water.

Preparing the mix

Pour **Keracolor SF** into a clean, rust-free container of clean water or **Fugolastic** (if required for the application) while mixing, at a ratio of 33-34% by weight.

Stir the mix, preferably with a low-speed mixer to avoid entraining air, until a smooth paste is obtained. Let the mix stand for 2-3 minutes, and stir again briefly before use. Use the mix within 2 hours of its preparation.

Application

Fill the joints with the prepared **Keracolor SF** mix using a special MAPEI trowel or rubber float, without leaving any gaps or steps. Remove any excess of **Keracolor SF** from the surface, by moving the trowel or float, diagonally across the joints while the mix is still fresh.

Finishing

When the mix loses its plasticity and becomes opaque, which usually takes place after 10-20 minutes, clean the residual **Keracolor SF** with a hard, cellulose sponge (e.g. a MAPEI sponge), working diagonally across the joints. Rinse the sponge frequently, using two different containers of water: one to remove the excess mix from the sponge, and the other, containing clean water, to rinse the sponge. This operation may also be carried out with a power float.

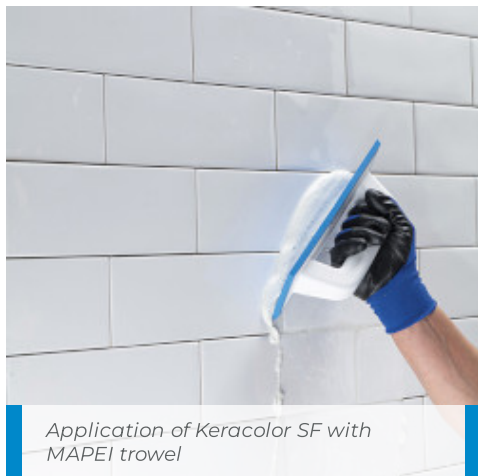
To help remove the hardened product from the tiles, use a dampened Scotch-Brite® pad or a disc-type power float with special abrasive-felt discs.

If the cleaning operation is carried out too soon (the mix is still too plastic), the joints may be partially emptied, therefore more subject to colour variations. On the other hand, if the grout has already set, it will have to be cleaned mechanically which may cause scratching on the surface of the tiles. If grouting is carried out in extremely hot, dry or windy weather, we recommend dampening the joints filled with **Keracolor SF** after a few hours.

Damp curing of **Keracolor SF** improves its final characteristics in all cases. Final cleaning of the powdery film of **Keracolor SF** from the surface may be carried out with a clean, dry cloth. After the final cleaning, if the surface of the floors or walls is still covered with cementitious residues, an acid cleaner can be used (e.g. **UltraCare Keranet**), when the grout is completely cured.

If a product to remove grout residues at the time of application is required, the use of **UltraCare Keranet Easy**, suitable to remove excess grout from surfaces immediately after application, is recommended.

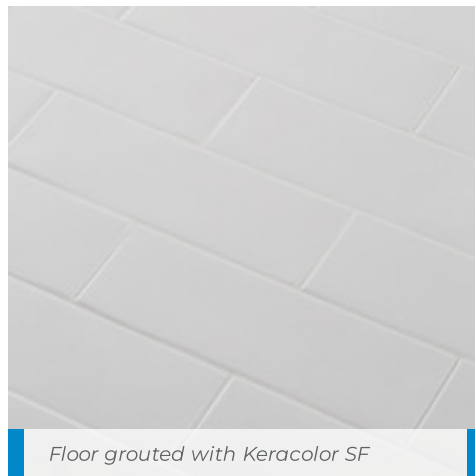
For the use of products from the **UltraCare** range, please refer to the relative Technical Data Sheets.



Application of Keracolor SF with MAPEI trowel



Cleaning and finishing grouts with hard cellulose sponge



Floor grouted with Keracolor SF

SET TO LIGHT FOOT TRAFFIC

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

READY FOR USE

(with hypothetical curing at +23°C and 50% R-H.)

The surfaces are ready for traffic after 3 days.

Water basins and swimming pools may be filled up 7 days after grouting.

CLEANING

Tools and containers may be cleaned using plenty of water if the **Keracolor SF** is still fresh.

CONSUMPTION

Coverage of **Keracolor SF** 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 overleaf.

PACKAGING

22 kg bags and boxes containing 4x5 kg alupacks.

COLOURS AVAILABLE

Keracolor SF is available in white (100).

STORAGE

Keracolor SF may be stored for up to 12 months in its original packaging in a dry place (22 kg bags); 24 months for 5 kg bags. Please always refer to the packaging instructions.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values) In compliance with: – European EN 13888 as CG2WA – ISO 13007-3 as CG2WA	
PRODUCT IDENTITY	
Consistency:	fine powder
Colour:	white (100)
Bulk density (kg/m ³):	880
Dry solids content (%):	100
EMICODE:	EC1 Plus - very low emission

APPLICATION DATA (+23°C and 50% R.H.)	
Mixing ratio (%):	33-34
Consistency of the mix:	fluid paste
Density of mix (kg/m ³):	1,960
pH of mix:	approx. 13
Pot life of mix:	approx. 2 hours
Application temperature range:	from +5°C to +35°C
Waiting time for grouting after laying: – 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 before finishing:	10-20 minutes
Set to light foot traffic:	24 hours
Ready for use:	3 days (7 days for tanks and swimming pools)
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 12808-4): Shrinkage (EN 12808-4): Water absorption after 30 mins. (EN 12808-5): Water absorption after 4 hours (EN 12808-5):	In compliance with European norm EN 13888 as CG2WA
Resistance to humidity:	excellent
Resistance to ageing:	excellent
Resistance to solvents, oil and alkalis:	excellent
Resistance to acids:	good if pH > 3
Temperature resistance:	from -30°C to +80°C

CONSUMPTION TABLE DEPENDING ON THE SIZE OF THE TILE AND WIDTH OF THE JOINTS (kg/m ²)			
Size of the tile (mm)	Width of the joint (mm)		
	2	3	4
20x20x4	1.2		
50x50x4	0.5		
75x150x6		0.5	0.7
100x100x7		0.6	0.8

100x100x9		0.8	1.1
150x150x6		0.4	0.5
200x200x7		0.3	0.4
200x200x9		0.4	0.5
300x300x10		0.3	0.4
300x300x20		0.6	0.8
300x600x10		0.2	0.3
400x400x10		0.2	0.3
500x500x10			0.2
600x600x10			0.2
750x750x10			0.2
100x600x9			0.6
150x600x9			0.5
150x900x9			0.4
150x1200x10			0.5
225x450x9			0.4
225x900x9			0.3
250x900x9			0.3
250x1200x10			0.3
600x600x5			0.1
600x600x3			0.1

CONSUMPTION CALCULATION FORMULA:

$$\frac{(A + B)}{(A \times B)} \times C \times D \times 1.5 = \frac{\text{kg}}{\text{m}^2}$$

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)

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

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.

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