



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 CG2 improved (2) cementitious (C) mortar for tile joints (G).

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

TECHNICAL CHARACTERISTICS

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

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 optimum durability;
- smooth, compact finished surface with a very fine grain structure, with low water absorbency and therefore easy cleaning;
- very good resistance to abrasion;
- low shrinkage rate, therefore free of cracks and crevices;
- good resistance to acids with $\text{pH} > 3$;
- 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 the **Fugolastic** Technical Data Sheet.

Keracolor SF



Laying the product with a rubber float



Cleaning with a sponge



Cleaning with a cloth

RECOMMENDATIONS

- Do not mix **Keracolor SF** with cement or other products, and never add water once it has started to 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 off sufficiently or which are not adequately protected against rising damp, may cause unsightliness due to the formation of salts on the surface.
- Expansion and movement 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 apply 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 of the joints

Before grouting the joints, wait until the installation mortar or the adhesive is 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 narrow tiles, or in the case of high temperatures or in windy conditions, dampen the joints with clean water.

Preparing the mix

Pour the **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 drawing in 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 squeegee, without leaving any gaps or steps. Remove any excess **Keracolor SF** from the surface, by moving the trowel or squeegee diagonally across the joints while the mix is still fresh.

Finishing layer

When the mix loses its flexibility and becomes opaque, which usually takes place after 10-20 minutes, clean off the residual **Keracolor SF** with a hard, damp sponge (e.g. a MAPEI sponge), working in a diagonal direction with respect to 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 special machine with a sponge belt. To make removal of the hardened product from the tiles easier, a dampened Scotch-Brite® pad or a rotating, single-head polisher with a felt disk may be used before cleaning with the sponge.

If the cleaning operation is carried out too soon (the mix is still too runny), some of the mix may be removed from the joints which makes them more subject to changes in colour. 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 operation, if the surface still has traces of **Keracolor SF**, it may be cleaned down with an acidic cleaner (e.g. **Keranet**), by following the relevant instructions, at least 10 days after grouting the joints. Only use **Keranet** on surfaces which are resistant to acid, and never use it on marble or limestone material.

SET TO LIGHT FOOT TRAFFIC

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

READY FOR USE

The surfaces are ready for traffic after 7 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 FF** varies depending on the width of the joints, the size and thickness of the tiles. Some examples of coverage in kg/m² are shown in the chart overleaf.

TECHNICAL DATA (typical values)

In compliance with:

- European EN 13888 as CG2
- ISO 13007-3 as CG2WA
- American: ANSI A 118.6 - 1999

PRODUCT IDENTITY

Consistency:	fine powder
Colour:	white
Bulk density (kg/m³):	880
Dry solids content (%):	100
Storage:	12 months in its original packaging in a dry place
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety Instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Customs class:	3824 50 90

APPLICATION DATA (+23°C and 50% R.H.)

Mixing ratio (%):	33-34
Consistency of the mix:	fluid paste
Density of mix (kg/m³):	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 adhesive: - on walls bonded with quick-setting adhesive: - floors laid with mortar: - on floors bonded with normal adhesive: - on floors bonded with quick-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 operation:	10-20 minutes
Step-on time:	24 hours
Waiting time before putting into service:	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 12808-4): 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 CG2
Resistance to humidity:	
Resistance to ageing:	
Resistance to solvents, oil and alkalis:	
Resistance to acids:	
Temperature resistance:	
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

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



Grouted joints in
butt-jointed tiles

PACKAGING

22 kg bags or 4x5 kg boxes.

COLOURS AVAILABLE

Keracolor SF is available in white.

STORAGE

Keracolor SF may be stored for up to 12 months in its original packaging in a dry place.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Keracolor SF contains cement that, when in contact with sweat or other bodily fluids, produces an irritant alkaline reaction and allergic reactions in those predisposed. Wear protective clothing, gloves and eye/face protection.



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
20 X 20 X 4	1.2		
50 X 50 X 4	0.5		
75 X 150 X 6		0.6	0.9
100 X 100 X 6		0.6	0.9
100 X 100 X 10		0.9	1.5
100 X 200 X 6		0.4	0.7
100 X 200 X 10			1.2
150 X 150 X 6		0.4	0.6
200 X 200 X 8		0.4	0.6
120 X 240 X 12			1.2
250 X 250 X 12			0.8
250 X 250 X 20			1.2
250 X 330 X 8		0.3	0.5
300 X 300 X 8		0.3	0.4
300 X 300 X 10		0.3	0.5
300 X 300 X 20			1.0
300 X 600 X 10		0.3	0.4
330 X 330 X 10		0.3	0.5
400 X 400 X 10		0.3	0.4
450 X 450 X 12			0.4
500 X 500 X 12			0.4
600 X 600 X 12			0.3

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)

For further information, please refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.