



# 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 tile joints (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 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 and 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 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.

## **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

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Laying the product with a rubber float



Cleaning with a sponge



Cleaning with a cloth

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 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 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 of **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 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 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](http://www.mapei.com). Some examples of coverage in kg/m<sup>2</sup> 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.

The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Keracolor SF** contains cement, which when in contact with sweat or other body fluids, may cause an irritant alkaline reactions and allergic reactions to those predisposed. It may cause damage to the eyes. During use, wear protective gloves and

## TECHNICAL DATA (typical values)

In compliance with:

– European EN 13888 as CG2WA  
– ISO 13007-3 as CG2WA

### PRODUCT IDENTITY

<b>Consistency:</b>	fine powder
<b>Colour:</b>	white (100)
<b>Bulk density (kg/m<sup>3</sup>):</b>	880
<b>Dry solids content (%):</b>	100
<b>EMICODE:</b>	EC1 R Plus - very low emission

### APPLICATION DATA (+23°C and 50% R.H.)

<b>Mixing ratio (%):</b>	33-34
<b>Consistency of the mix:</b>	fluid paste
<b>Density of mix (kg/m<sup>3</sup>):</b>	1,960
<b>pH of mix:</b>	approx. 13
<b>Pot life of mix:</b>	approx. 2 hours
<b>Application temperature range:</b>	from +5°C to +35°C
<b>Waiting time for grouting after laying:</b> – on walls bonded with normal adhesive: – on walls bonded with quick-setting adhesive: – on walls 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
<b>Waiting time before finishing operation:</b>	10-20 minutes
<b>Step-on time:</b>	24 hours
<b>Waiting time before putting into service:</b>	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 CG2WA

<b>Resistance to humidity:</b>	excellent
<b>Resistance to ageing:</b>	excellent
<b>Resistance to solvents, oil and alkalis:</b>	excellent
<b>Resistance to acids:</b>	good if pH > 3
<b>Temperature resistance:</b>	from -30°C to +80°C

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CONSUMPTION TABLE DEPENDING ON THE SIZE OF THE TILE AND WIDTH OF THE JOINTS (kg/m <sup>2</sup> )			
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)      C = thickness of the tile (in mm)  
 B = width of the tile (in mm)      D = width of the joint (in mm)

wear 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 Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.



Grouted joints in butt-jointed tiles

### 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](http://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](http://www.mapei.com).

**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 (Gesellschaft 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](http://www.mapei.com)**



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