



# Keracolor SF

## Super-fine cementitious mortar for grouting tile joints up to 4 mm



### **SURPASSES THE REQUIREMENTS OF AS 4992.3-2006**

**Keracolor SF** is an improved (2) cementitious (C) grout (G) classified as CG2.

### **WHERE TO USE**

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

### **Some application examples**

- Grouting narrow tile joints for 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 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



Grouting a glass mosaic (bathroom) with a trowel



Finishing a glass mosaic with a sponge



Grouting of pre-smoothed and glossed granite floor with rubber float

## 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 salty or dirty water.
- Use the product at a temperature between +5°C and +35°C.
- The amount of mixing water must be precisely measured. Excess water could induce the appearance of a whitish coat over the surface (efflorescence). Different colour tones could result if mixtures with different water ratios are prepared. Efflorescence over the surface is due to the formation of calcium carbonate and could also be the consequence of not fully hydrated grouts, of substrates not adequately dry, or of substrates not adequately protected from rising damp.
- 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, 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 raked back to at least 2/3 of the tile thickness. 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

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 33-35% by weight. When grouting floors, the mixture can be made thinner by adding more water (approx. 33% 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 SF** varies depending on the width of the joints, and the size and

## TECHNICAL DATA (typical values)

In compliance with:

- Australian AS 4992.3 - 2006
- European EN 13888 as CG2
- ISO 13007-3 as CG2WA
- American: ANSI A 118.6 - 1999

### PRODUCT IDENTITY

<b>Type:</b>	fine powder
<b>Colour:</b>	white (# 100) and Jasmine (# 130)
<b>Density (g/cm<sup>3</sup>):</b>	1.0-1.4
<b>Dry solid content (%):</b>	100
<b>Storage:</b>	12 months in a dry place in original packaging
<b>EMICODE:</b>	EC1 R - very low emission
<b>Hazard classification according to EC 1999/45:</b>	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
<b>Customs class:</b>	3824 50 90

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

<b>Mixing ratio:</b>	100 parts <b>Keracolor SF</b> with 33-35 parts of water by weight
<b>Consistency of mix:</b>	thin paste
<b>Density of mix (g/cm<sup>3</sup>):</b>	1.98 ± 0.02
<b>pH of mix:</b>	about 12
<b>Pot life:</b>	about 2 hours
<b>Application temperature range:</b>	from +5°C to +35°C
<b>Grouting after laying:</b> - on bonded wall: - on mortar wall: - on bonded floor: - on mortar floor:	4-8 hours 2-3 days 24 hours 7-10 days
<b>Ready for traffic:</b>	after 24 hours
<b>Cure time:</b>	7 days

### FINAL PERFORMANCES

<b>Surpasses the requirements of AS4992.3 - 2006</b>	
<b>Resistance to moisture:</b>	excellent
<b>Resistance to ageing:</b>	excellent
<b>Resistance to solvents, oils and alkali:</b>	excellent
<b>Resistance to acids:</b>	good if pH > 3
<b>Resistance to temperature:</b>	from -30°C to +80°C



Grouting single-fired tile with a trowel



Finishing with a Scotch-Brite® pad



An example of a grouted mosaic tile kitchen

# Keracolor SF



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
20 X 20 X 4	1.2		
50 X 50 X 4	0.5		
75 X 150 X 6		0.6	0.7
100 X 100 X 6		0.6	0.7
100 X 100 X 10		0.9	1.2
100 X 200 X 6		0.4	0.5
100 X 200 X 10			0.9
150 X 150 X 6		0.4	0.6
200 X 200 X 8		0.4	0.45
120 X 240 X 12			0.85
250 X 250 X 12			0.55
250 X 250 X 20			0.90
250 X 330 X 8		0.3	0.34
300 X 300 X 8		0.3	0.30
300 X 300 X 10		0.3	0.38
300 X 300 X 20			0.75
300 X 600 X 10		0.3	0.28
330 X 330 X 10		0.3	0.34
400 X 400 X 10		0.3	0.28
450 X 450 X 12			0.30
500 X 500 X 12			0.25
600 X 600 X 12			0.23

#### CONSUMPTION CALCULATION FORMULA:

$$\frac{(A + B)}{(A \times B)} \times C \times D \times 1.4 = \frac{\text{kg}}{\text{m}^2}$$

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)

thickness of the tiles. Some examples of coverage in kg/m<sup>2</sup> are shown in the chart overleaf.

#### PACKAGING

20 kg bags.

#### COLOURS AVAILABLE

Keracolor SF is available in white (#100) and Jasmine (#130).

#### 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 INSTALLATION

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

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.



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**  
 More than 150 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.au](http://www.mapei.com.au)**



An example of a grouted double-fired tile floor

