



Ultracolor



**Fast setting and drying
grout for 2 to 20 mm
joints, available in
26 colours; does not
produce efflorescence**

WHERE TO USE

Interior and exterior grouting on walls and floors in all types of ceramic tiles (double fired, single fired, porcelain tile, klinker, etc.), terracotta, stone materials (natural stones, marble, granite, agglomerates, etc.), glass and marble mosaics.

Some application examples

- Grouting floor and wall ceramic tiles in areas with heavy traffic (airports, shopping centres, restaurants, bars etc.).
- Grouting floors and walls of residential areas (hotels, private homes etc.).
- Grouting floors and walls of external façades, balconies, terraces and swimming pools.

TECHNICAL CHARACTERISTICS

Ultracolor is a mixture of special hydraulic binders, graded aggregates, special polymers, additives and pigments.

The following features are obtained when mixed with the right ratio of water and used correctly:

- Uniform colours and no stains because **Ultracolor** does not produce efflorescence. From the tests made with an electronic microscope (SEM), it has been observed that unlike Portland cement based binders of traditional cement grouts, the special cements of **Ultracolor**, during the hydration process, do not produce calcium hydroxide that gives origin to efflorescence.



Ultracolor



Grouting a wall with a rubber float (bathroom or kitchen)



Grouting a porcelain tile floor with a float



finishing wall with a sponge (still fresh grout)

- Ultra-violet and atmosphere resistant colours.
- Brief waiting time for cleaning and easy finishing.
- After a short time, floor and wall surfaces are ready for traffic and usage.
- A smooth final surface with low water absorption, therefore easy to clean.
- Excellent abrasion resistance.
- Almost completely shrinkage-compensated, therefore free of cracks and fissures.
- Excellent compression strength, flexural strength and resistance to freeze/thaw cycles, therefore excellent durability.
- Good resistance to acids with pH >3.

RECOMMENDATIONS

- **Ultracolor** does not contain Portland cement, therefore should not be mixed with it or other hydraulic binders. Never add water to the mixture that is beginning to set.
- Never mix **Ultracolor** with salt or dirty water.
- Use the product in temperatures between +5°C and +35°C.
- Grout on properly dried and waterproofed substrates to avoid the appearance of a whitish coat over the surface.
- After having filled the joints with the mixture, it is not recommended to sprinkle the grout with **Ultracolor** powder to avoid an uneven colour.
- When resistance to acids or hygiene is required, use the suitable anti-acid grout (e.g. **Kerapoxy**).
- Expansion joints and fraction joints in floors and walls should never be filled with **Ultracolor**, but with the appropriate elastic MAPEI sealants (e.g. **Mapesil AC**, **Mapesil LM**, or **Mapeflex PU21**).

- Sometimes 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 protection treatment over the surface of the ceramic tiles, but 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 sheet has elapsed.

The joints must be cleaned, free of dust and emptied at least 2/3 of the tile thickness. The 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

While stirring, pour **Ultracolor** into a clean, rust-free container containing 25-27% of clean water by weight, depending on the colour.

When grouting floors, the mixture can be made thinner by adding more water (approx. 35% by weight).

Mix, possibly with a low speed mixer to avoid excess formation of air bubbles, to a smooth consistency.

Wait for 2-3 minutes and briefly re-stir before use. Use the mixture within 20-30 minutes from preparation.

Applying the grout

Fill the joints with **Ultracolor** using the appropriate MAPEI trowel or rubber float, making sure the joints are compacted completely with no unevenness. Remove excess **Ultracolor**, while still fresh, from the surface moving the trowel or float diagonally to joints.

Finishing

When the mixture loses its plasticity and becomes opaque, usually after 15-25 minutes, clean excess **Ultracolor** 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.

Finishing can also be carried out while the product is partially hardened, after 50-60 minutes, using a dampened Scotch-Brite® pad over the grouts to finish the surface.

This can also be carried out using a disc-type power float with special abrasive-felt discs of the Scotch-Brite® type.

If cleaning is carried out too early (when the mixture is still plastic), the joints may be partially emptied therefore more subject to colour variations.

When applying **Ultracolor** in extremely hot, dry or windy climates, it is recommended to wet the joints after several hours.

Curing **Ultracolor**, the wet curing always improves its final performances.

Final cleaning of a possible powdery haze of **Ultracolor** 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 dirty with **Ultracolor** due to an inadequate application technique, an acid cleaner can be used (e.g. **Keramet**), following the relative instructions, at least

TECHNICAL DATA (typical values):

In compliance with:

- European prEN 13888 such as CG2 Ar, W
- American ANSI A118.7 - 1999

PRODUCT IDENTITY

Type:	fine powder
Colour:	26 colours from "THE COLOURED GROUTS 2000" range
Density (apparent):	1.4 g/cm ³
Dry solid content:	100%
Storage:	12 months in a dry place in original packaging
Health hazard acc. To EEC 88/379:	No. The product contains special hydraulic binders that when in contact with sweat or any other body fluids could produce an alkaline reaction which is slightly irritant. Use protective gloves and goggles. For further information consult the safety data sheet.
Inflammability:	no
Customs class:	3824 50 90

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

Mixing ratio:	100 parts Ultracolor with 25-27 parts water by weight depending on the colour used
Consistency of mix:	thin paste
Density of mix:	1.9 g/cm ³
pH of mix:	approx. 11
Pot life:	20-25 minutes
Application temperature:	from +5°C to +35°C
Grouting after installation:	
- on bonded wall with normal setting adhesive:	4-8 hours
- on bonded wall with fast setting adhesive:	1-2 hours
- on thick bed mortar wall:	2-3 days
- on bonded floor with normal setting adhesive:	24 hours
- on bonded floor with fast setting adhesive:	3-4 hours
- on thick bed mortar floor:	7-10 days
Waiting time for finishing:	15-30 minutes
Ready for traffic after:	approx. 3 hours
Cure time:	24 hours

FINAL PERFORMANCES

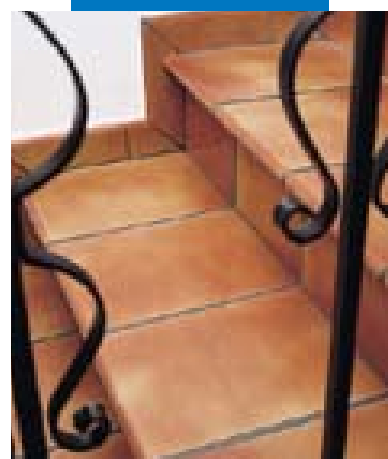
Flexural strength after 28 days (N/mm²) (prEN 12808-3):	7.0
Compressive strength after 28 days (prEN 12808-3):	30.0
Flexural strength after freeze/thaw cycles (N/mm²) (prEN 12808-3):	6.5
Compressive strength after freeze/thaw cycles (N/mm²) (prEN 12808-3):	31.5
Resistance to abrasion (prEN 12808-2):	800 (loss in N/mm ³)
Shrinkage (mm/m) (prEN 12808-4):	1.10
Water absorption (g) after 30' (prEN 12808-5):	1.4
Water absorption (g) after 4 hours (prEN 12808-5):	2.2
Resistance to solvents and oils:	excellent
Resistance to alkali:	excellent
Resistance to acids:	good if pH > 3



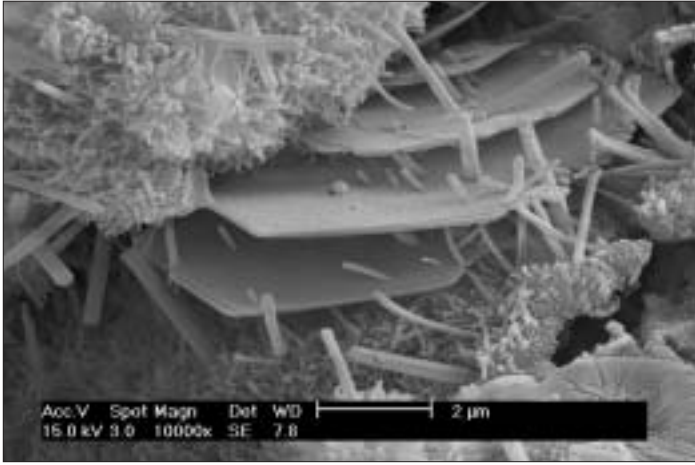
Finishing terracotta floor with a Scotch-Brite® pad



Floor finishing with a disc-type power float

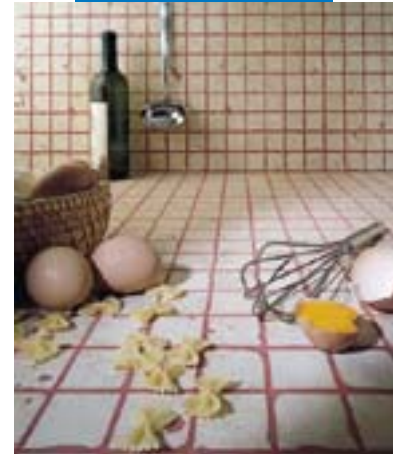
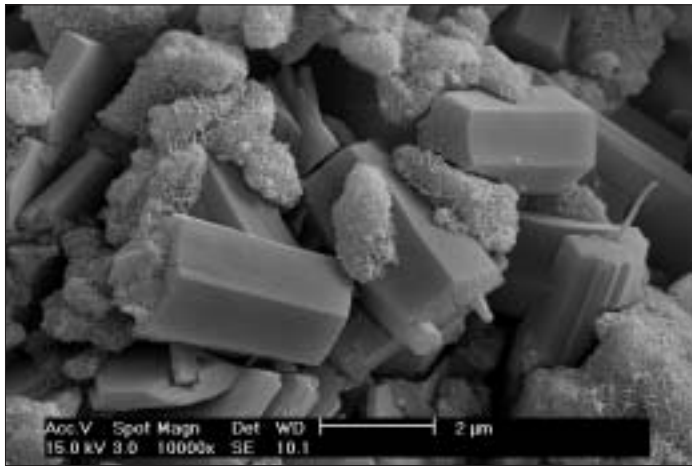


An example of a terracotta stair-case with wide grouts

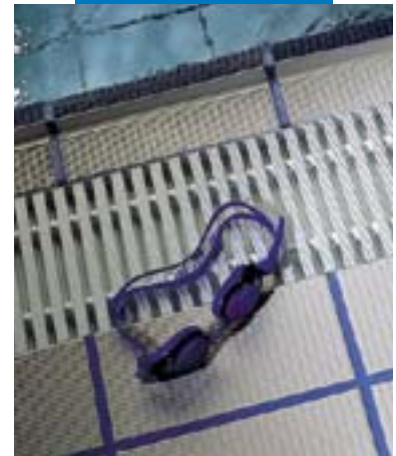


Hydration of the Portland cement based binder of a conventional grout

Hydration of Ultracolor special cement based binder. Notice the absence of Portlandite (calcium hydroxide) laminar crystals



An example of a grouted ceramic tile kitchen



An example of a swimming pool edge with wide grouts

24 hours after grouting the joints. Use **Keranet** only on acid-resistant surfaces and never on marble or lime materials.

READY FOR USE

Floors are ready for traffic after approx. 3 hours.
Basins and swimming pools can be filled 48 hours after grouting.

Cleaning

Clean tools and containers with plenty of water before **Ultracolor** hardens.

COVERAGE

Coverage of **Ultracolor** 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.

PACKAGING

25 kg bags, 4x5 kg and 9x1 kg boxes depending on the colour.

COLOURS

Ultracolor is available in 26 colours from the "THE COLOURED GROUTS 2000" range.
See colour chart.

STORAGE

N.B.: **Ultracolor** can be stored 12 months

in a dry place in original packaging, however over time, setting time could slow down but the final characteristics do not alter.

SAFETY INSTRUCTIONS

The product contains special hydraulic binders that when in contact with sweat or any other body fluids could produce an alkaline reaction which is slightly irritant. Use protective gloves and goggles. For further information consult the safety data sheet.

FOR PROFESSIONALS.

WARNING

N.B. - Although the technical details and recommendations contained in this product report 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 applications: 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.



An example of a grouted terracotta wine-cellar

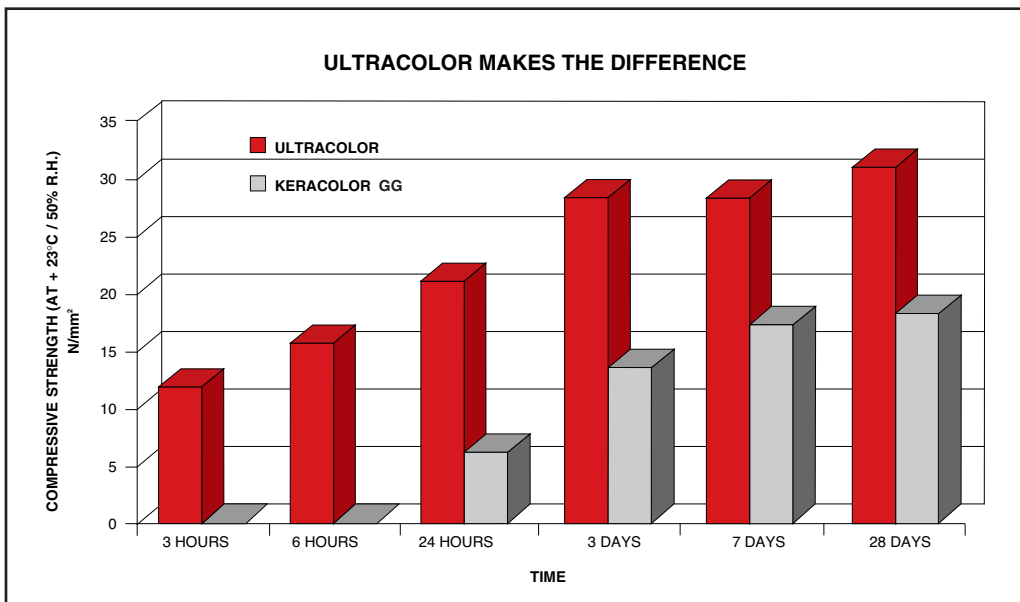
COVERAGE TABLE DEPENDING ON THE SIZE OF THE TILE AND WIDTH OF THE JOINTS (kg/m²)

Size of the tile (mm)	Width of the tile (mm)						
	2	3	5	8	10	15	20
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	1.8	2.3		
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	1.8	2.3		
250 X 250 X 12			0.8	1.2	1.5		
250 X 250 X 20			1.2	2.0	2.4	3.6	4.8
250 X 330 X 8		0.3	0.5	0.7	0.9		
300 X 300 X 8		0.3	0.4	0.7	0.8		
300 X 300 X 10		0.3	0.5	0.8	1.0		
300 X 300 X 20			1.0	1.6	2.0	3.0	4.0
300 X 600 X 10		0.3	0.4	0.6	0.8		
330 X 330 X 10		0.3	0.5	0.8	0.9		
400 X 400 X 10		0.3	0.4	0.6	0.8		
450 X 450 X 12			0.4	0.7	0.8		
500 X 500 X 12			0.4	0.6	0.8		
600 X 600 X 12			0.3	0.5	0.6		

FORMULA FOR THE CALCULATION OF COVERAGE:

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

- A = length of tile (in mm)
- B = width of tile (in mm)
- C = thickness of tile (in mm)
- D = width of joint (in mm)



Ultracolor



An example of a ceramic tile wall grout



An example of a grout in a public premises

All relevant references of the product are available upon request.

