



Ultracolor Plus



High-performance, anti-efflorescence, non irritating quick-setting and drying polymer-modified mortar with water-repellent DropEffect® and mould-resistant BioBlock® technology for grouting joints from 2 to 20 mm wide

CLASSIFICATION ACCORDING TO EN 13888

Ultracolor Plus is a cementitious (C), non irritating mortar for grouting (G) improved (2), with reduced water absorption (W) and high resistance to abrasion (A), class CG2WA.

WHERE TO USE

Internal and external grouting of floors and walls in all types of ceramic (double-fired, single-fired, klinker, porcelain, etc.), terracotta, stone material (natural stone, marble, granite, agglomerates, etc.), and glass and marble mosaic.

Some application examples

- Grouting floors and walls in areas subject to intense traffic (airports, shopping centres, restaurants, bars, etc.).
- Grouting floors and walls in residential areas (hotels, private houses, etc.).
- Grouting floors and walls on façades, balconies, terraces and on swimming pools.

TECHNICAL CHARACTERISTICS

Ultracolor Plus is a mortar formulated not to be irritant made up of a blend of special hydraulic binders, graded aggregates, special polymers, water repellent admixtures, organic molecules and pigments.

With **Ultracolor Plus**, the **Ultracolor** technology is based on a special, self-hydrating hydraulic binder which guarantees perfect colour uniformity, by two innovative technologies which are the result of MAPEI research: BioBlock® and DropEffect®.

The BioBlock® technology consists in special organic molecules which, by distributing themselves evenly in



Ultracolor Plus



Spreading Ultracolor Plus on wood-effect porcelain floor tiles with a rubber float



Cleaning the joints with a Scotch-Brite® pad (when the product is semi hardened)



Cleaning and finishing the joints with a hard cellulose sponge

the micro-structure of the joints, block the formation of micro-organisms that cause mould damage.

The DropEffect® technology, with a synergic effect, reduces the absorption of surface water.

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

- water-repellent and droplet-effect;
- uniform colour and free of staining since **Ultracolor Plus** does not produce efflorescence. From an analysis carried out using an electronic microscope (SEM), note that, compared with a Portland cement-based binder in a normal cementitious grouting mortar, the special cements in **Ultracolor Plus** do not generate the calcium hydroxide (hydrolysis lime) crystals during the hydration process, which cause efflorescence;
- colours resistant to ultra-violet rays and atmospheric agents;
- short waiting time before cleaning and easy finishing;
- ready for light foot traffic and for use after a short period of time;
- smooth, compact finished surface, with low water absorbency for easy cleaning;
- shrinkage compensated, therefore free from cracks;
- optimum resistance to abrasion, compression and flexural strength, even after freeze/thaw cycles, and therefore optimum durability;
- good resistance to acids with pH > 3.

RECOMMENDATIONS

- **Ultracolor Plus** does not contain Portland cement and must not be mixed with gypsum or other hydraulic binders; never add water to the mix once it has started to set.
- Never mix **Ultracolor Plus** with salty or dirty water.
- Use the product at temperatures between +5°C and +35°C.
- Carry out grouting only on substrates which are sufficiently dry or have been waterproofed, to avoid a whitish film forming on the surface.
- In order to avoid an uneven colour finish, we do not recommend sprinkling **Ultracolor Plus** powder onto the filled grout joints.
- When resistance to acids or, where extreme cleanliness or sterile conditions are required, use a suitable acid-resistant epoxy grout.
- Expansion and movement joints on walls and floors must never be filled with **Ultracolor Plus**. Use a suitable flexible sealant from the MAPEI range.
- The surface of certain tiles or stone material may have micro-porosity or a rough surface. We recommend carrying out a preliminary test to check how easy it is to clean the surface where necessary to apply a protective treatment to the surface, to ensure the grout does not penetrate into the surface porosity of the tiles.
- If an acid-based cleaner is used to clean the joint, we recommend testing the

product beforehand to check the resistance of the colour. Always make sure that the joints are thoroughly rinsed down to avoid leaving traces of acid in the joints.

APPLICATION PROCEDURE

Preparing the joints

Grouting may take place when the adhesive is completely set. Make sure that the waiting times indicated in the technical data sheets are followed.

The joints must be clean, free of 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 while still fresh. With very absorbent tiles, high temperatures or windy conditions, dampen the joints with clean water.

Preparing the mix

While stirring, pour **Ultracolor Plus** into a clean, rust-free container containing 20-26% by weight of clean water.

Mix the grout with a low-speed mixer to avoid air entrainment, until a smooth paste is obtained.

Let the mix stand for 2-3 minutes, and stir again briefly before use.

Use the mix within 20-25 minutes of its preparation.

Applying the grout

Fill the joints with the **Ultracolor Plus** mix using a special MAPEI grout float or rubber squeegee, without leaving any gaps or steps. Remove any excess of **Ultracolor Plus** from the surface, by moving the float or the rubber squeegee diagonally to the joints while the mix is still fresh.

Finishing

When the mix loses its plasticity and becomes opaque, which usually takes place after 15-30 minutes, clean off the excess **Ultracolor Plus** with a hard cellulose, damp sponge (e.g. a MAPEI sponge), working in a diagonal direction 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 machine with a sponge belt.

It is possible to finish the surface also when the mix is partially set, after 50-60 minutes, with a damp Scotch-Brite® sponge: pass it over the joints to even out the surface. This operation may be also carried out with a single disk rotary machine with special Scotch-Brite® type felt disk. If the cleaning operation is carried out too soon (the mix is still too plastic), some of the mix may be removed from the joints, which may change their colour.

If grouting is carried out in extremely hot, dry or windy weather, we recommend that the joints filled with **Ultracolor Plus** are dampened after a few hours.

Damp curing of **Ultracolor Plus** improves its final characteristics in all cases.

Final cleaning of the powdery film of **Ultracolor Plus** from the surface may be carried out with a clean, dry cloth.

TECHNICAL DATA (typical values)

Conforms to standards:

– European EN 13888 as CG2WA
– ISO 13007-3 as CG2WAF

PRODUCT IDENTITY

Consistency:	fine powder
Colour:	34 colours from the MAPEI range
Bulk density (kg/m ³):	1,400
Dry solids content (%):	100
EMICODE:	EC1 Plus - very low emission

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

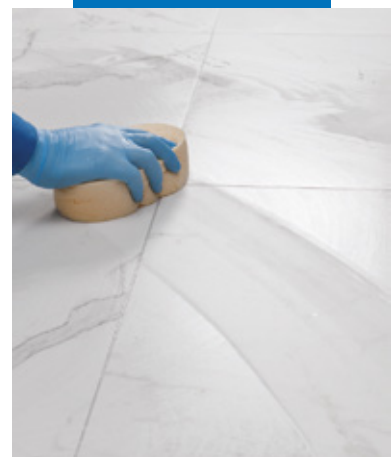
Mixing ratio:	100 parts Ultracolor Plus with 20-26 parts water, dependent on the colour
Consistency of the mix:	fluid paste
Density of mix (kg/m ³):	1,980
pH of mix:	approx. 11
Pot life of mix:	20-25 minutes
Application temperature range:	from +5°C to +35°C
Grouting after installation: – on walls bonded with normal adhesive: – on walls bonded with fast-setting adhesive: – on walls with mortar: – on floors bonded with normal adhesive: – on floors bonded with fast-setting adhesive: – on floors with mortar:	4-8 hours 1-2 hours 2-3 days 24 hours 3-4 hours 7-10 days
Waiting time for finishing:	15-30 minutes
Set to light foot traffic:	approx. 3 hours
Ready for use:	24 hours (48 hours for basins and swimming pools)

FINAL PERFORMANCES

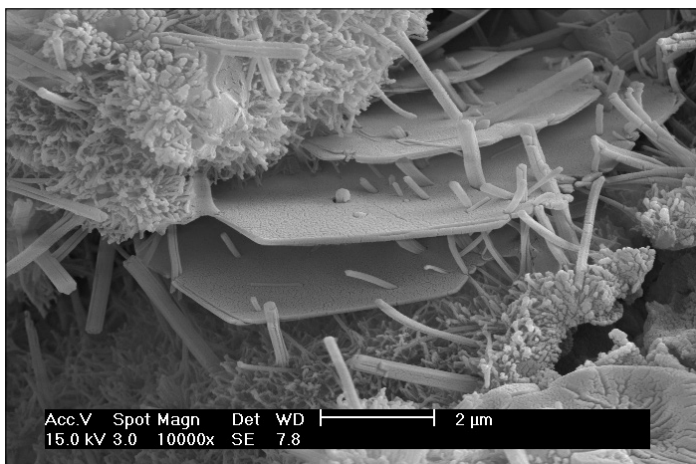
Flexural strength after 28 days (N/mm ²) (EN 12808-3):	9
Compressive strength after 28 days (N/mm ²) (EN 12808-3):	35
Flexural strength after freeze/thaw cycles (N/mm ²) (EN 12808-3):	9
Compressive strength after freeze/thaw cycles (N/mm ²) (EN 12808-3):	35
Abrasion resistance (EN 12808-2):	700 (loss in mm ³)
Shrinkage (mm/m) (EN 12808-4):	1.5
Water absorption (g) (EN 12808-5) after 30 minutes:	0.1
Water absorption (g) (EN 12808-5) after 4 hours:	0.2
Resistance to solvents and oil:	excellent
Resistance to alkalis:	excellent
Resistance to acids:	good resistance to acids with pH > 3



Spreading Ultracolor Plus on marble-effect porcelain floor tiles with a rubber float

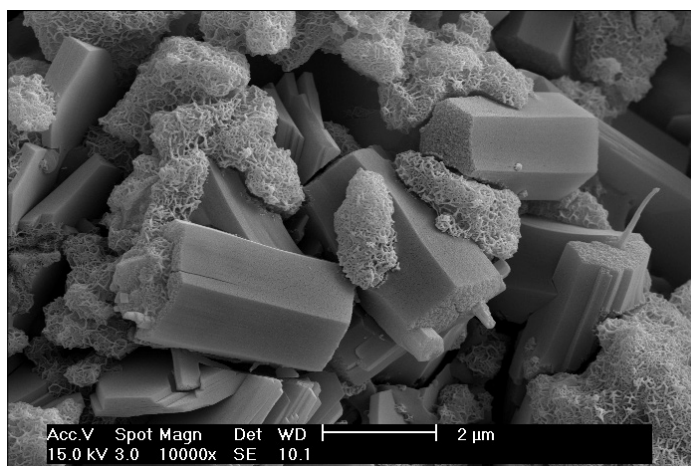


Cleaning and finishing the joints with a hard cellulose sponge



Hydration of a Portland cement-based binder in a traditional grouting mortar

Hydration of Ultracolor Plus special cement-based binder. Note the absence of lamellar crystals of Portlandite (calcium hydroxide), which is the cause of whitish efflorescence



After the final cleaning operation, if the surface still has traces of **Ultracolor Plus** due to incorrect application, it may be cleaned down with an acidic cleaner (e.g. **Keranet**), by following the relevant instructions, at least 24 hours 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. 3 hours.

READY FOR USE

Surfaces grouted with **Ultracolor Plus** may be put into service after 24 hours. Basins and swimming pools may be filled up 48 hours after grouting.

Cleaning

Tools and containers may be cleaned using plenty of water whilst **Ultracolor Plus** is still fresh.

CONSUMPTION

The consumption of **Ultracolor Plus** varies according to the size of the joints and the size and thickness of the tiles. The table illustrates a number of examples of the consumption in kg/m².

PACKAGING

23 kg bags, and 4x5 kg or 8x2 kg alupack boxes dependent on the colour.

COLOURS AVAILABLE

Ultracolor Plus is available in 34 colours of the MAPEI range (please refer to the colour samples).

STORAGE

Ultracolor Plus may be stored for 12 months (for 23 kg bags) and 24 months (for 2 and 5 kg bags) in its original packaging in a dry place.

However, after a certain amount of time, the setting time may extend but without modifying the final characteristics of the product.

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

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultracolor Plus is not hazardous according to the current regulation regarding the classification of mixtures. The product contains special hydraulic binders which, in contact with sweat or other body fluids, may produce a slightly irritating alkali reaction. During use, wear protective gloves and goggles and take the usual precautions for handling chemicals.

For further and complete information about the safe use of our product please refer to the latest version of our Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

CONSUMPTION TABLE ACCORDING TO THE SIZE OF THE TILES AND WIDTH OF THE JOINTS (kg/m²)

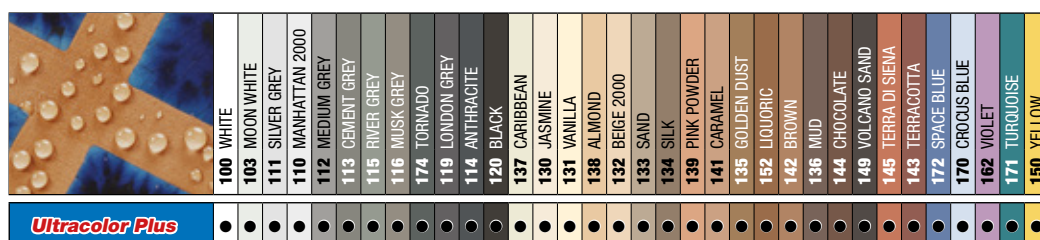
Size of the tile (mm)	Width of the joint (mm)				
	2	3	5	8	10
75x150x6	0.4	0.6	1.0	1.5	1.9
100x100x7	0.4	0.7	1.1	1.8	2.2
100x100x9	0.6	0.9	1.4	2.3	2.9
150x150x6	0.3	0.4	0.6	1.0	1.3
200x200x7	0.2	0.3	0.6	0.9	1.1
200x200x9	0.3	0.4	0.7	1.2	1.4
300x300x10	0.2	0.3	0.5	0.9	1.1
300x300x20	0.4	0.6	1.1	1.7	2.1
300x600x10	0.2	0.2	0.4	0.6	0.8
400x400x10	0.2	0.2	0.4	0.6	0.8
500x500x10	0.1	0.2	0.3	0.5	0.6
600x600x10	0.1	0.2	0.3	0.4	0.5
750x750x10	0.1	0.1	0.2	0.3	0.4
100x600x9	0.3	0.5	0.8	1.3	1.7
150x600x9	0.2	0.4	0.6	1.0	1.2
150x900x9	0.2	0.3	0.6	0.9	1.1
150x1200x10	0.2	0.4	0.6	1.0	1.2
225x450x9	0.2	0.3	0.5	0.8	1.0
225x900x9	0.2	0.2	0.4	0.6	0.8
250x900x9	0.1	0.2	0.4	0.6	0.7
250x1200x10	0.2	0.2	0.4	0.6	0.8
600x600x5	0.1	0.1	0.1	0.2	0.3
600x600x3			0.1	0.1	0.2
1000x500x5		0.1	0.1	0.2	0.2
1000x500x3			0.1	0.1	0.1
1000x1000x5			0.1	0.1	0.2
1000x1000x3				0.1	0.1
3000x1000x5			0.1	0.1	0.1
3000x1000x3				0.1	0.1

FORMULA TO CALCULATE CONSUMPTION:

$$\frac{(A + B)}{(A \times B)} \times C \times D \times 1.6 = \frac{\text{kg}}{\text{m}^2}$$

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

To calculate consumption rates for tiles with different sizes and joints with different widths to those used in the table for reference purposes please refer to the "Product Calculator" available on our website at www.mapei.com



N.B.: Due to the printing processes involved, the colours should be taken as merely indicative of the shades of the actual product

Ultracolor Plus



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.

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.

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



BUILDING THE FUTURE



Two-component acid-resistant epoxy grout (available in 20 colours) for joints of at least 3 mm. Can also be used as an adhesive

CLASSIFICATION IN COMPLIANCE WITH EN 13888

Kerapoxy is a reaction resin (R) grout (G) classified as RG.

CLASSIFICATION IN COMPLIANCE WITH EN 12004

Kerapoxy is an improved (2) reaction resin adhesive (R) and slip resistant (T) classified as R2T.

Conformity of Kerapoxy is declared in ITT certificate n° 25040322/Gi (TUM) issued by the Technische Universität München laboratory (Germany) and in ITT certificates n° 2008-B-2748/7.1, 2008-B-2748/8.1 and 2008-B-2748/9.1 issued by the Institute MPA Dresden (Germany).

WHERE TO USE

Indoor and outdoor grouting of ceramic tile and natural stone floors and walls. Also suitable for acid-resistant bonding and rapid setting of ceramic tiles, stone materials, fibre-cement, concrete and any other building material on all types of substrates normally used in construction.

Kerapoxy allows you to create floors, walls and worktops, etc. in compliance with the HACCP system and the requirements of EC Regulation No. 852/2004 regarding hygiene and foodstuffs.

Some application examples

- Grouting floors and walls in the food industry (dairies, abattoirs, breweries, wine-cellars, conserved-food plants, etc.), shops and areas where hygiene is required (ice-cream shops, butchers, fish vendors, etc.).



Kerapoxy



Grouting of single fired tile wall with a float



Finishing of single fired tile wall with a Scotch-Brite® pad



Finishing of single fired tile wall with a sponge

- Grouting industrial floors and walls (electrical industries, tanneries, battery rooms, paper-mills, etc.), where high mechanical resistance and resistance to acid attack is required.
- Grouting swimming pools; particularly suitable for basins containing salt or thermal water.
- Grouting tanks containing aggressive chemicals (purification plants, etc.).
- Grouting ceramic tiles on laboratory benches, kitchen work surfaces, etc.
- Acid-resistant bonding of tiles (used as an adhesive in compliance with class R2T specification according to EN 12004 standard).
- Bonding marble doorsteps and window-sills.
- Bonding tiles in plastic reinforced by fibre glass swimming pools.
- Bonding special pieces of tiles.

TECHNICAL CHARACTERISTICS

Kerapoxy is a two-component, epoxy-resin-based product with silica sand and special components, with excellent resistance to acids and excellent cleanability.

This is a product with very low emission of volatile organic compounds and is classified Emicode EC1 R Plus by GEV when used for grouting.

The following features are obtained when used correctly:

- Excellent mechanical and chemical resistance, therefore excellent durability.
- A smooth final surface with low water absorption, therefore easy to clean; ensures hygiene.
- Easy workability and finishing.
- Becomes very hard and is highly resistant to heavy traffic.
- No shrinkage, therefore absence of cracks and fissures.
- Uniform colours that are resistant to ultra-violet rays and atmospheric agents.
- Excellent bonding.

RECOMMENDATIONS

- Because of the tessera's reduced thickness, **Kerapoxy** can also be used for grouting glass mosaics with joints less than 3 mm.
- When grouting ceramic tiled floors and walls subject to oleic acid attack (e.g. ham and sausage industries, oil-mills, etc.) and aromatic hydrocarbon, **Kerapoxy IEG** can be used (available in 113 or 130 reference colour of MAPEI range).
- For flexible expansion joints or joints subject to movement use an elastic sealant from the MAPEI line (e.g. **Mapesil AC**, **Mapesil LM**, **Mapeflex PU45 FT** or **Mapeflex PU21**).
- **Kerapoxy** does not ensure perfect adhesion when used for grouting tiles with wet edges or contaminated with cement, dust, oil, grease, etc.
- Unglazed klinker tiles should be grouted with the same colour tone **Kerapoxy**. All other colours should be used only with glazed tiles.
- Do not use **Kerapoxy** for grouting terracotta tiles because they are difficult to clean.

- Make preliminary sample tests before grouting porcelain tiles with a contrasting colour of **Kerapoxy** (e.g. black on white).
- Always carry out preliminary tests before grouting stone or ground porcelain with a porous or rough surface.
- Do not add water or any solvents to **Kerapoxy** to make it more fluid.
- Use the product in temperatures between +12°C and +30°C.
- The quantities are already in the correct proportions, therefore mistakes should not be made. Do not guess the quantities when mixing the two components. A wrong catalysis ratio could impair the hardening process.
- When removing already cured **Kerapoxy** from the joints, use a hot air industrial drier. Remove hardened **Kerapoxy** from the tiles with **Pulicol 2000**.
- When grouting large floor surface areas, it is recommended to use **Kerapoxy P**, available in grey 113 of MAPEI range (other colours are available upon request for quantities higher than 300 kg) because it is very fluid and easy to apply.

APPLICATION PROCEDURE

Preparing the joints

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

The excess adhesive or mortar should be removed while still fresh.

Before grouting, make sure that the installation mortar or the adhesive has set and released most of its moisture.

Kerapoxy is not affected by the moisture on the surface; the joints should not be wet during work.

Preparing the mix

Pour all the hardener (component B), into a bucket containing component A and mix well until a smooth paste is obtained. For perfect mixing and avoiding overheating of the mixture, which could reduce working time, a low speed electric stirrer should be used. Use the paste within 45 minutes from mixing.

Applying the grout

Spread **Kerapoxy** with the appropriate MAPEI float, making sure the joints are completely filled. Use the same float, but on edge, to remove excess grout.

Finishing

After grouting with **Kerapoxy**, floors and walls should be cleaned immediately, before the product dries.

Wet the surface thoroughly and emulsify with an abrasive pad for cleaning joints (such as Scotch-Brite® or MAPEI tile-joint cleaning kit), making sure not to wash-out the joints. When cleaning walls, the cleaning pad should be fully soaked with water. The excess liquid can be removed with a hard cellulose sponge (e.g. MAPEI sponge), and should be replaced when too full of resin. Use the same type of sponge for the final tooling of the grout. It is very important that once the finishing process has ended, no traces of **Kerapoxy**

CHEMICAL RESISTANCE OF CERAMIC TILING GROUTED WITH KERAPOXY*

PRODUCT				USE	
Group	Name	Concentration %	Laboratory benches	INDUSTRIAL FLOORING	
				Permanently used (+20°C)	Sporadically used (+20°C)
Acids	Acetic acid	2.5	+	+	+
		5	+	(+)	+
		10	-	-	-
	Hydrochloric acid	37	+	+	+
	Chromic acid	20	-	-	-
	Citric acid	10	+	(+)	+
	Formic acid	2.5	+	+	+
		10	-	-	-
	Lactic acid	2.5	+	+	+
		5	+	(+)	+
		10	(+)	-	(+)
	Nitric acid	25	+	(+)	+
		50	-	-	-
	Pure oleic acid		-	-	-
	Phosphoric acid	50	+	+	+
		75	(+)	-	(+)
	Sulphuric acid	1.5	+	+	+
		50	+	(+)	+
	96	-	-	-	
Tannic acid	10	+	+	+	
Tartaric acid	10	+	+	+	
Oxalic acid	10	+	+	+	
Alkalis	Ammonia in solution	25	+	+	+
	Caustic soda	50	+	+	+
	Sodium hypochlorite in solution:				
	active chlorine	6.4 g/l	+	(+)	+
	active chlorine	162 g/l	-	-	-
	Potassium permanganate	5	+	(+)	+
		10	(+)	-	(+)
Potassium hydroxide	50	+	+	+	
Sodium bisulphite	10	+	+	+	
Saturated solutions at +20°C	Sodium hyposulphite		+	+	+
	Calcium chloride		+	+	+
	Ferric chloride		+	+	+
	Sodium chloride		+	+	+
	Sodium chromate		+	+	+
	Sugar		+	+	+
	Aluminium sulphate		+	+	+
Oils and fuels	Petrol, fuels		+	(+)	+
	Turpentine		+	+	+
	Diesel fuel		+	+	+
	Tar oil		+	(+)	(+)
	Olive oil		(+)	(+)	+
	Light fuel oil		+	+	+
	Petrol		+	+	+
Solvents	Acetone		-	-	-
	Ethylene glycol		+	+	+
	Glycerine		+	+	+
	Methylene glycol acetate		-	-	-
	Perchloroethylene		-	-	-
	Carbon tetrachloride		(+)	-	(+)
	Ethyl alcohol		+	(+)	+
	Trichloroethylene		-	-	-
	Chloroform		-	-	-
	Methylene chloride		-	-	-
	Tetrahydrofurane		-	-	-
	Toluene		-	-	-
	Carbon sulphide		(+)	-	(+)
	White spirit		+	+	+
	Benzene		-	-	-
	Trichloroethane		-	-	-
	Xylene		-	-	-
	Mercuric chloride (HgCl ₂)	5	+	+	+
	Hydrogen peroxide	1	+	+	+
		10	+	+	+
	25	+	(+)	+	

Legend: + excellent resistance

(+) good resistance

- poor resistance

* Evaluated in compliance with EN 12808-1 standards

TECHNICAL DATA (typical values)

In compliance with:

- European EN 12004 as R2T
- ISO 13007-1 as R2T
- European EN 13888 as RG
- ISO 13007-3 as RG

PRODUCT IDENTITY

	component A	component B
Consistency:	thick paste	dense liquid
Colour:	20 colours available	
Density (g/cm³):	1.64	0.97
Dry solids content (%):	100	100
Brookfield viscosity (mPa·s)	3,500,000	900
EMICODE (as a grout):	EC1 R Plus - very low emission	

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

Mix ratio:	component A : component B = 9 : 1
Consistency of mix:	thick paste
Density of mix (kg/m³):	1,550
Pot life:	45 minutes
Application temperature:	from +12°C to +30°C
Open time (as an adhesive):	30 minutes
Adjustability time (as an adhesive):	60 minutes
Set to light foot traffic:	24 hours
Ready for use:	4 days

FINAL PERFORMANCE

Shear adhesion strength according to EN 12003 (N/mm²):	
- initial:	25
- after water immersion:	23
- after thermal shock:	25
Flexural strength (EN 12808-3) (N/mm²):	31
Compressive strength (EN 12808-3) (N/mm²):	55
Resistance to abrasion (EN 12808-2):	147 (loss in mm ³)
Water absorption (EN 12808-5) (g):	0.05
Resistance to moisture:	excellent
Resistance to ageing:	excellent
Resistance to solvents and oils:	very good (see table)
Resistance to acids and alkalis:	excellent (see table)
Temperature in use:	from -20°C to +100°C



Finishing a porcelain tiled floor with single-brushed power float or rubber squeegee



Grouting a ceramic tile floor with wood inlays with a trowel



Finishing a ceramic tile floor with wood inlays with a sponge

CONSUMPTION RATES ACCORDING TO THE SIZE OF THE TILES AND THE WIDTH OF THE JOINTS (kg/m²)

Size of tile (mm)	Width of joint (mm)			
	3	5	8	10
75x150x6	0.6	1.0	1.5	1.9
100x100x7	0.7	1.1	1.8	2.2
100x100x9	0.9	1.4	2.3	2.9
150x150x6	0.4	0.6	1.0	1.3
200x200x7	0.3	0.6	0.9	1.1
200x200x9	0.4	0.7	1.2	1.4
300x300x10	0.3	0.5	0.9	1.1
300x300x20	0.6	1.1	1.7	2.1
300x600x10	0.2	0.4	0.6	0.8
400x400x10	0.2	0.4	0.6	0.8
500x500x10	0.2	0.3	0.5	0.6
600x600x10	0.2	0.3	0.4	0.5
750x750x10	0.1	0.2	0.3	0.4
100x600x9	0.5	0.8	1.3	1.7
150x600x9	0.4	0.6	1.0	1.2
150x900x9	0.3	0.6	0.9	1.1
150x1200x10	0.4	0.6	1.0	1.2
225x450x9	0.3	0.5	0.8	1.0
225x900x9	0.2	0.4	0.6	0.8
250x900x9	0.2	0.4	0.6	0.7
250x1200x10	0.2	0.4	0.6	0.8
600x600x5	0.1	0.1	0.2	0.3
600x600x3		0.1	0.1	0.2
1000x500x5	0.1	0.1	0.2	0.2
1000x500x3		0.1	0.1	0.1
1000x1000x5		0.1	0.1	0.2
1000x1000x3			0.1	0.1
3000x1000x5		0.1	0.1	0.1
3000x1000x3			0.1	0.1

FORMULA FOR THE COVERAGE CALCULATION:

$$\frac{(A + B)}{(A \times B)} \times C \times D \times 1.6 = \frac{\text{kg}}{\text{m}^2}$$

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

For sizes not covered by the table, our website www.mapei.com has a calculator available to estimate consumption rates according to the size of the tiles and the width of the joints.

are left on the tile surface because it will be very difficult to remove. It is therefore necessary to frequently rinse the sponge with clean water during the cleaning process.

When finishing large floor surface areas, use a rotary, disc-type power float with Scotch-Brite® abrasive pads, well saturated with water. All excess liquid can be removed with a rubber squeegee.

The final cleaning cycle may be carried out using **Kerapoxy Cleaner** (special cleaning solution for epoxy grout). **Kerapoxy Cleaner** may also be used to remove thin residues of grout several hours after application. In such cases, the product must be left to react for longer (15-20 mins.).

The efficiency of **Kerapoxy Cleaner** depends on the amount of resin residues and how much time has passed since application. Cleaning must always be carried out while "fresh" as described above.

APPLICATION PROCEDURE AS AN ADHESIVE

After mixing the two components as described above, spread the adhesive with a notched trowel. Apply the tile under firm pressure to ensure good contact. After setting, bonding becomes extremely strong and resistant to chemical agents.

SET TO LIGHT FOOT TRAFFIC

At +20°C, floors are set to light foot traffic after 24 hours.

READY FOR USE

4 days. Surfaces can also undergo chemical attack after 4 days.

Cleaning

Clean tools and containers with plenty of water before **Kerapoxy** hardens. When **Kerapoxy** has hardened, removal is only possible by mechanical means or with **Pulicol 2000**.

CONSUMPTION

Consumption of **Kerapoxy** varies depending on the width of the joints, the size and thickness of the tiles. The table shows consumption in kg/m². When **Kerapoxy** is used as an adhesive, consumption is 2-4 kg/m².

PACKAGING

Kerapoxy is supplied, with mixing proportions carefully measured, in drums containing component A and bottles of component B to be mixed when using the product.

The total weight of the units is: 10, 5 and 2 kg in total.



An example of a grouted battery room




An example of grouted ornamental stones



An example of a bonded and grouted kitchen worktop

Kerapoxy

	WHITE	SILVER GREY	MANHATTAN 2000	MEDIUM GREY	CEMENT GREY	ANTHRACITE	BLACK	JASMINE	VANILLA	BEIGE 2000	CARAMEL	BROWN	CHOCOLATE	TERRA DI SIENA	TERRACOTTA	SPACE BLUE	CROCUS BLUE	VIOLET	TURQUOISE	YELLOW
Kerapoxy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

N.B.: Due to the printing processes involved, the colours should be taken as merely indicative of the shades of the actual product

COLOURS

Kerapoxy is available in 20 colours from the “MAPEI Coloured Grouts” range.

STORAGE

Kerapoxy can be stored 24 months in a dry place in original packaging. Store component A at a temperature of at least +10°C to avoid crystallisation which, however, can be reversed by warming.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Kerapoxy part A is irritant for skin and eyes. Both part A and B may cause sensitisation if they come in contact with the skin of predisposed subjects. **Kerapoxy** part B is corrosive and may cause burns.

Kerapoxy part B contains low weight epoxy resins which can cause sensitization if cross-contamination with other epoxy compounds occurs. During use, wear protective gloves and goggles and take the usual precautions when handling chemicals. In case of contact with eyes or skin, wash immediately with plenty of water and seek medical attention. Furthermore, **Kerapoxy**, part A and B are dangerous for the environment. Do not dispose of the product in the environment. 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 ONLY FOR PROFESSIONAL USE.

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 effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.



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
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



An example of a grouted brewery floor



An example of a grouted wine cellar floor



BUILDING THE FUTURE