powercolor

draft 222

POWERCOLOR

The very latest generation cement-based grouting compound with silver ions for joints 1 to 5 mm in width. The oligodynamic action of the silver ions in SILVER ACTIVE SYSTEM allows Powercolor to guarantee extremely effective, long-lasting protection against fungal growth, bacteria and mould.

groutings and sealants

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CG2 EN 13888

S1 EN 12002 with TC-STUK

MAIN FEATURES

With silver ions
Antibacterial action even after the grouting has carbonated
Fungicide
Highly sanitizing
Colours remain fast over time
Water repellent
Frost proof
High degree of hardness
High resistance to abrasion

APPEARANCE

Fine powder in 4 colours (see card)

STORAGE

18 months in a dry place

FIELDS OF USE

- Grouting the joints between all types of tiles, both indoors and outdoors
- Grouting marble
- Tile laying with joints 1 to 5 mm in width
- Grouting all types of mosaic
- Tile laying on electrically or water-heated screeds
- Grouting in places that must always be in a perfectly sanitized condition

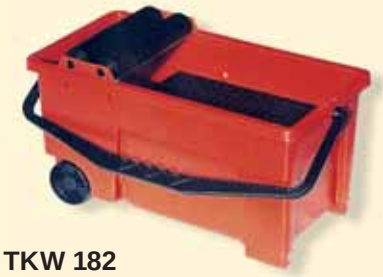
TECHNICAL SPECIFICATIONS OF THE PRODUCT

POWERCOLOR mainly consists of high-strength cements, selected quartz mineral charges, synthetic resins and specific additives. Thanks to the oligodynamic action of the silver ions in SILVER ACTIVE SYSTEM, Powercolor guarantees extremely effective, long-lasting protection against the proliferation of fungi, bacteria and mould.
The active protection of SILVER ACTIVE SYSTEM provides a preventive function even after the grouting has carbonated. Tested by Centro Ceramico Bologna.
Moreover, the new COLOR SAVE SYSTEM prevents the colors of the grouting from fading over time, ensuring a colorfast and extremely bright finish.
Lastly, thanks to WATER REPELLENT SYSTEM, Powercolor grouting compound becomes water repellent and can therefore be used for swimming pools, tanks and so forth without being damaged by the water they contain.
For further details, ask our technical office for the safety brief or download it from our web site www.technokolla.com.

RECOMMENDED ACCESSORIES

TKW 452
Applicator

TKW 481
Sponge



TKW 182
Washing trough

LABORATORY TESTS

Tests conducted on POWERCOLOR in the laboratories of Centro Ceramico of Bologna have established that: the bacterial survival rate is 0, while colonization by mould and fungi is inhibited.

Resistance to fungal growth test in accordance with standard: BS 5980.

PHOTO 1 PHOTO 2

Photo 1 shows the sample of a conventional grouting product that has just been inoculated by colonies of mould spores.
Photo 2 shows the same sample after 14 days of incubation, with mould growth index 4 visually detected coverage (31-70%).

PHOTO 3 PHOTO 4

Photo 3 shows a sample of POWERCOLOR grouting compound that has just been inoculated by colonies of mould spores.
Photo 4 shows the same sample after 14 days of incubation where no mould appears to have grown, thus corresponding to mould growth index 0 (no visible growth).

HOW TO PREPARE THE MIXTURE

POWERCOLOR should be blended with 1.3 l. of clean water per 5 kg bag (26%) until a creamy mixture is obtained.
It is of vital importance for the paste be lump-free and perfectly uniform in colour. Small quantities of POWERCOLOR can also be mixed by hand but bear in mind that varying amounts of water between one batch and the next can result in joints with slightly different colours. Use TC-STUK instead of the water to blend the mixture if the flooring is subjected to intensive traffic, on elastic surfaces or when applying to façades and swimming pools.

GROUTING OPERATION

Apply POWERCOLOR with a suitable rubber squeegee, and make sure that the joints are filled completely. Wipe off any excess grouting compound with the edge of the applicator. Once the grouting begins to harden, the surface can be wiped clean with a clean, damp sponge. After this operation, the joints should be homogeneous. Any traces left on the tiles can be removed easily the next day using a soft, dry cloth. If TC-STUK is used instead of the water, this operation must be done immediately after the surfaces have been cleaned with a sponge.
A whitish layer, that mainly consists of calcium carbonate and is commonly called bloom, sometimes forms on the surface of grouting made with cement-based materials. Bloom is caused by many factors that may interact with each other as the grouting dries. The water used for the mixture is one of these, and becomes a harmful factor if too much is used or when various mixtures are prepared with different amounts of water. The drying time also affects the colour shade to a considerable degree, as it is influenced by the temperature and humidity of the air, by the residue humidity in the materials used for fixing, such as adhesives, or substrates that have not yet fully dried. Our advice is: dose the water used for the mixture in compliance with the instructions on the pack; avoid making lots of different mixtures; never stop grouting a room halfway and then continue with it the day after; always wait until the substrate and adhesive have completely dried before grouting.

AVAILABLE COLOURS

00 WHITE
03 ASH
08 BEIGE
29 LIGHT GREY

AMOUNT OF GROUTING COMPOUND REQUIRED g/m²

TILE in cm	JOINT in mm		
	2	3	5
Vitreous mosaic 2x2x0,38	1300		
Mosaic 5x5x0,4	450		
10x10x0,6	350	500	840
7,5x15x0,7	400	600	980
15x15x0,9	350	500	840
20x20x0,9	250	380	630
12x24x0,9			790
20x20x0,9	250	380	630
20x30x9	200	300	530
30x30x1	190	280	470
30x60x1	140	210	350
40x40x1	140	210	350
50x50x1	110	170	280
60x120x1,1	80	110	200

FORMULA TO CALCULATE THE CONSUMPTIONS

$$A \times B \times \underset{\text{in mm}}{} \left[\frac{C + D}{C \times D} \right]_{\text{in cm}} \times 140 = \frac{gr}{m^2}$$

WARNINGS AND RECOMMENDATIONS

- do not exceed the recommended amount of water in the mixture
- the mixture must never be fluid
- first perform a cleanability test if a dark colour is used on light polished vitrified stoneware or on natural stone
- when the tiles are very absorbent, it is advisable to wet the surface prior to grouting. Never interrupt the grouting process in a room for more than two hours
- do not add anything to the product that is not specified in this technical data sheet
- it is advisable to use Tc-Stuk in the mixture instead of water for grouting in swimming pools
- Powercolor is not a substitute for the disinfectants normally used in swimming pools

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TECHNICAL DATA	VALUE	REQUISITE	STANDARD
Appearance	fine powder		
Temperature during application	min. +5°C, max +35°C		
Water used for mixing	1.3 l. - 5 kg bag (26%)		
Curing time	3 min		
Pot life	*2 h		
Thermal resistance	from -30 °C to +80°C		
Abrasion resistance	750 mm^3	≤ 1000 mm^3	EN 12808-2
Bending strength after dry storage	7.0 N/mm^2	≥ 3.5 N/mm^2	EN 12808-3
Bending strength after freezing/thawing cycles	6.5 N/mm^2	≥ 3.5 N/mm^2	EN 12808-3
Compressive strength after dry storage	35.0 N/mm^2	≥ 15 N/mm^2	EN 12808-3
Compressive strength after freezing/thawing cycles	35.0 N/mm^2	≥ 15 N/mm^2	EN 12808-3
Shrinkage	1.6 mm/m	≤ 2 mm/m	EN 12808-4
Water absorption after 30 min.	0.8 gr	≤ 2 gr	EN 12808-5
Water absorption after 240 min.	1.2 gr	≤ 5 gr	EN 12808-5
Resistance to the growth of bacteria S% (survival):	0%		protocol CCB (RP 336/10/S CCB)
Resistance to the growth of bacteria S% after aging:	0%		protocol CCB (RP 341/10/S CCB)
Degree of mould colonization C% (growth):	no visible growth		BS 5980 (RP 333/10/S CCB)
Degree of mould colonization C% after aging:	no visible growth		BS 5980 (RP 338/10/S CCB)

TIME TO WAIT BEFORE GROUTING	
Floor with adhesive	*24 h
Floor with quick-setting adhesive	*4-6 h
Floor fixed with mortar	*8-10 days
Wall with adhesive	*5-6 h
Wall with quick setting adhesive	*2 h
Ready for use	*After 7 days
Pedestrian traffic	*After 24h

* these times refer to a temperature of 23°C-50% R.H.. They are shorter at higher temperatures and longer at lower temperatures.

SPECIFICATION

Ceramic floor and wall tiles must be grouted using a cement-based powder grouting compound with silver ions that provides active protection against bacteria, fungi and mould, such as Technokolla's POWERCOLOR, which can be used for filling joints up to 5 mm in width.

Technokolla reminds you to examine the **"notes" document** that completes the information in this data sheet.
The document can be downloaded in the pdf format.

TECHNOKOLLA

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