

## **TECHNOSTUK 2-12**

Cement-based grouting for joints 2 to 12 mm in width. Microshield system provides active protection that helps to prevent the growth of bacteria, fungi and mould, which can cause stains and deterioration of the grouting. Highly sanitizing.

groutings and sealants



















technostuk 2-12







#### **MAIN FEATURES**

High degree of hardness Mould-inhibiting Fungicide Monocomponent Water repellent Sanitizing Bacteriostatic **UV** resistant Frost proof Abrasion resistant



#### **APPEARANCE**

Fine powder in 5 colours (see colour card in www.technokolla.com)

#### **STORAGE**

12 months in dry place (25 kg bag) 24 months in dry place (5 kg bag)

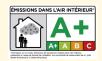
# **TESTED BY**

#### **FIELDS OF USE**

- Grouting joints between all types of ceramic tiles, both indoors and outdoors.
- Grouting natural stone.
- Tile laying with 2 to 12 mm joints.
- Grouting in swimming pools.
- Fixing on heating floors.

#### LOW-VOC product

# **EUROFINS**



# **TECHNICAL SPECIFICATIONS OF THE PRODUCT**

Technostuk 2-12 mainly consists of high-strength cements, mineral charges, synthetic resins and specific additives. MICROSHIELD SYSTEM provides active protection that helps to prevent the growth of bacteria, fungi and mould, which can cause stains and deterioration of the grouting. Moreover, the new COLOR SAVE SYSTEM prevents the grouting from fading over time, ensuring a colorfast and extremely bright finish.

Lastly, thanks to WATER REPELLENT SYSTEM Technokolla's grouting range becomes water repellent and can therefore be used for swimming pools, tanks, etc., without being damaged by the water they contain. For further details, ask the technical office for the safety brief or download it from the web site www.technokolla.com.



#### **LABORATORY TESTS**

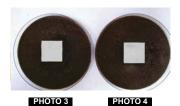
The laboratory tests performed by Centro Ceramico of Bologna on Technokolla's cement-based grouting compounds with MICROSHIELD SYSTEM active protection additive have established that: the bacterial survival rate is 0, while colonization by mould and fungi is inhibited.

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



**Photo 1** shows the sample of 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 (31-70%).



In **Photo 3**, the sample of Technokolla's grouting with the addition of Microshield system active protection additive 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

Blend TECHNOSTUK 2-12 with 5.75 l. of clean water per 25 kg bag and 1.15 l. of clean water per 5 kg bag (23%) until mixture is creamy.

It is of vital importance for the paste to be lump-free and perfectly uniform in colour. Use perfectly clean tools and a low speed blender (approx. 500 rpm) when preparing the mixture. Small quantities of TECHNOSTUK 2-12 can also be mixed by hand but bear in mind that varying amounts of water between one batch and the next can result in slightly different colour joints.

It is advisable to blend the mixture with TC-STUK instead of water if the floor is subjected to intensive traffic, on elastic substrates or when applying to façades and in swimming pools.

#### **GROUTING OPERATION**

Apply TECHNOSTUK 2-12 with the special rubber trowel, and make sure that the joints are filled completely. Wipe off any excess grouting 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 must 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 considerably, as it is influenced by the temperature and humidity of the air, and the residual humidity in the materials used for fixing, such as adhesives, or substrates that are 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 the day after; always wait until the substrate and adhesive have completely dried before grouting.

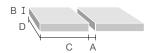
#### **AVAILABLE COLOURS**

00 WHITE 01 MANHATTAN 03 ASH 04 ANTHRACITE 08 BEIGE

GROUTING consumption g/m²							
TILE in cm	JOINT in mm						
	2	3	4	6	8	10	
Vitreous mosaic 2x2x0.38	1500						
2x2x0.4	1300						
5x5x0.4	500	770	1000				
10x10x0.6	380	580	770	1150	1550	1900	
7.5x15x0.7	450	680	900	1350	1800	2200	
15x15x0.9	380	580	770	1150	1550	1900	
20x20x0.9	290	430	580	900	1150	1400	
12x24x0.9			720	1100	1400	1800	
12x24x1.4			1100	1700	2200	2800	
20x30x0.9	240	360	480	720	960	1200	
30x30x1	210	320	430	640	850	1100	
30x60x1	160	240	320	480	640	800	
40x40x1	160	240	320	480	640	800	
50x50x1	130	190	260	390	510	640	
60x120x1.1	90	130	180	270	350	440	

## **CONSUMPTION CALCULATION FORMULA**

$$A \times B \times \begin{bmatrix} C + D \\ C \times D \\ in mm \end{bmatrix} \times 160 = \frac{g}{m^2}$$



### 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 when using dark colours on light polished porcelain stoneware or on natural stone
- if the tiles are very absorbent, it is advisable to wet the surface before grouting
- never interrupt the grouting operations for more than two hours in the same room or area
- do not add anything to the product that is not specified in this data sheet
- it is advisable to blend the mixture with TC-STUK instead of water for grouting in swimming pools

# technostuk 2-12

TECHNICAL DATA	VALUE	REQUIREMENT	STANDARD	
Appearance	granular powder			
Temperature during application	min. +5°C, max +35°C			
Water used for mixing	~ 5.75 l 25 kg bag (23±1%) / 1.15 l 5 kg bag (23±1%)			
Curing time	3 min			
Pot life	*2 h			
Thermal resistance	from -30 °C to +80°C			
Abrasion resistance	≤ 1000 mm³	≤ 1000 mm³	EN 12808-2	
Flexural strength after dry storage	~ 7.0 N/mm²	≥ 2.5 N/mm²	EN 12808-3	
Bending strength after freezing/thawing cycles	~ 3.0 N/mm <sup>2</sup>	≥ 2.5 N/mm²	EN 12808-3	
Compressive strength after dry storage	~ 30.0 N/mm <sup>2</sup>	≥ 15 N/mm²	EN 12808-3	
Compressive strength after freezing/thawing cycles	~ 30.0 N/mm <sup>2</sup>	≥ 15 N/mm²	EN 12808-3	
Shrinkage	~ 1.7 mm/m	≤ 3 mm/m	EN 12808-4	
Water absorption after 30 min.	~ 0.7 g	≤ 2 g	EN 12808-5	
Water absorption after 240 min.	~ 2.0 gr	≤ 5 g	EN 12808-5	
Resistence to the growth of bacteria S% (survival):	0%		protocol CCB (RP 335/10/S CCB)	
Degree of mould colonization C% (growth):	no visible growth		BS 5980 (RP 332/10/S CCB)	

#### **EMICODE**

 Emission class
 r.p. No. Eurofins

 EC1 Plus
 392-2013-00019203\_A\_1

TIME TO WAIT BEFORE GROUTING	
Floor with adhesive	*24 h
Floor with quick-setting adhesive	*4-6 h
Floor with dry-shake finish (mortar)	*8-10 days
Wall with adhesive	*5-6 h
Wall with quick setting adhesive	*2 h
Ready for use	* after 7 days
Treadable	* after 24 h

<sup>\*</sup> these times refer to a temperature of 23°C-50% R.H.. They become shorter with higher temperatures and longer at lower temperatures.

#### **SPECIFICATION**

Ceramic floor and wall tiles must be grouted using cement-based powder grouting with Microshield system additive, which helps to prevent the growth of bacteria, fungi and mould, such as Technokolla's TECHNOSTUK 2-12, used for filling joints up to 12 mm.

**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 from the website www.technokolla.com.

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