

StyleGrout Tech

FLEXIBLE, MULTIPURPOSE CEMENTITIOUS GROUT FOR GROUTING JOINTS UP TO 20 MM WIDE BETWEEN CERAMIC AND PORCELAIN TILES, PORCELAIN STONEWARE, SLABS, MOSAICS AND NATURAL STONES. WATER-REPELLENT AND ANTI-EFFLORESCENCE WITH HIGH COLOUR RESISTANCE, MAINTAINS THE FULLNESS AND CONSISTENCY OF JOINTS. FOR INTERIORS AND



DESCRIPTION

Powder cementitious grout made with hydraulic binders, inert fillers with fine granulometry, polymers, organic additives and pigments.
Available in different colours (see colour chart).

ADVANTAGES / FEATURES

- Product with very low volatile organic compound (VOC) emission rate. Complies with class EC1^{PLUS} according to the EMICODE protocol and class A+ (Émission dans l'air intérieur - French Regulations)
- Complies with the requirements of class CG2WA according to EN 13888 and ISO 13007-3
- Plastic and fluid thixotropic mix
- Suitable for the grouting of materials installed on heating screeds
- Full, smooth and compact joint
- Short waiting times and easy cleaning
- Avoids the formation of efflorescence
- Stable and consistent colours
- Quickly develops high mechanical strength, setting to light foot traffic in just 4 hours
- Resistant to mould
- Ready for use: 24 hours
- Compensated shrinkage
- Maintains excellent workability over time, without any bothersome thickening
- High abrasion resistance
- Water-repellent

PACKAGING

3 kg bags (boxes with 6 pcs) - 720 kg standard pallet

INTENDED USE

Intended uses	Suitable materials
Interiors - exteriors	Ceramic and porcelain tiles
Floors and walls	Single fired
Underfloor heating	Double fired
Façades	Terracotta - Clinker
Overlaying	Marble – Granite – Stone
Terraces and balconies	Natural stones
Residential, public, commercial building	Porcelain stoneware
Indoor wet areas (bathrooms, shower enclosures)	Ceramic and vitreous mosaics
Tanks, swimming pools, fountains	Thin laminated stoneware slabs
SPA and Hammam	Large sizes
Industrial floors	Slabs 320x160 cm
	Recomposed stone made with resin or cement

INSTALLATION PLANNING

The only way to guarantee the long-lasting performance of ceramic and porcelain tile installations is to properly plan the process. It is therefore advisable to consult the national regulations in force in each country, for example standard UNI 11493 in Italy, which provides all necessary instructions regarding the choice of materials, correct planning, use and installation, so as to ensure all quality, performance and durability standards are safely met. Some of the general precautions that need to be followed are listed below as an example.

Substrates

Before installation, check that substrates are clean, free of loose fragments, properly dried and cured, flat and level, and that mechanical strength requirements based on the intended use have been met.

Worksite conditions

Check the suitability of the temperature, humidity, light conditions etc. at the time of the product's application.

Materials

Check that all materials used for tiling (ceramic materials, levelling systems, adhesives, grouts, waterproofing products, etc.) are suitable for the intended use and have been correctly stored.

Expansion joints

Check that the perimeter, expansion, divider and structural elastic joints have been correctly designed and prepared. Divider joints are normally needed for 20/25 m² indoor sections, and 9-15m² outdoor sections. For exteriors, make sure joints are properly waterproofed and sealed.

Joints

In any type of ceramic and porcelain tiling, suitably sized joints must be created based on the following parameters:

- Type, format and size tolerance of tiles
- thermal expansion coefficients of tiling materials
- mechanical properties of installation materials
- position and trajectory of joints
- mechanical features of substrate
- Intended use and operating conditions

Butt joints are not allowed. Any plastic spacers must be removed before grouting.

PRELIMINARY CHECKS AND JOINT PREPARATION

Check that the adhesive or mortar used for tile bonding is completely set and dry.

The joints must be clean, free from dust and empty for the entire depth of the tiles.

Remove any plastic spacers.

Any traces of adhesive or mortar spilled back into the joints must be removed.

When grouting very absorbent tiles and in the presence of very warm climates, the joints will need to be dampened with a sponge soaked with water.

Make sure that the ceramic and porcelain tiles can easily be cleaned and their surface is not absorbent. Certain types of tiles (e.g., polished porcelain stoneware) or natural stones have micro-porosities and surface roughness that can cause surface staining and make cleaning very difficult.

Spot tests should always be performed.

MIX RATIO

3 kg (1 bag) – Water 0.8 l (26-28%)

PREPARING THE MIX

Pour the right quantity of water, depending on the application, into a clean container and slowly add the powder, stirring with an electric drill with mixing paddle until a consistent mix is obtained without lumps.

Let the mix rest for about 3 minutes and then briefly mix again for a few seconds.

The pot life is about 50 minutes at a temperature of +23°C, therefore it is advisable to mix only the quantity of material that can be applied within this period of time.

Do not use quantities of mixing water greater than those indicated to avoid product shrinkage during curing and the lowering of the final mechanical properties.

Do not add more water to the mix once setting has begun.

Hand mixing is not recommended.

APPLICATION

Apply the mix in the joints using a special rubber float until saturation, making diagonal movements with respect to the direction of the joints and removing any excess material from the surface of the ceramic covering.

Once the product has lost its plasticity and becomes opaque (normally after 15-30 minutes depending on the joint width), clean and finish the grouting surface with a well-wrung damp sponge without leaving water deposits on the fresh product.

Clean before the product sets in the joints.

Always use diagonal movements with respect to the direction of the joints so as not to remove any filling.

If cleaned too early, that is, when the grout is still plastic, the joints will be partially emptied and the final colour of the grouting will be inconsistent.

Any dried product halos can be easily removed from the surface of the ceramic covering using a clean rag after setting.

If there are still traces of product on the tile surface after cleaning, it can be removed with the acid detergent in powder form Litoclean, or in liquid form Litoclean EVO (for use see the relative technical data sheets) about 6-7 days after grouting.

Do not use Litoclean or Litoclean EVO in the case of non-acid-resistant materials such as marble or limestone.

WARNINGS

- Spread the product at temperatures between +5°C and +35°C inclusive
- Before application, make sure that the adhesive used to install the ceramics or mosaics has completely dried
- Change the cleaning water frequently
- Change the sponge when it is impregnated with product
- Protect against direct sunlight or strong air currents for the first 12 hours after application
- Respect the mix ratio
- Do not use the product on damp surfaces or surfaces subject to rising damp
- Do not add lime, cement or other foreign materials to the product
- Do not cover the grouted surface with sheets or other materials to prevent condensation from forming that could cause surface carbonation of the product resulting in an uneven colour. Wait at least 24-48 hours, depending on the temperature, before protecting the surface with breathable materials
- Mixes with different amounts of water may affect the final colouring
- Certain types of tiles (e.g., polished porcelain stoneware) or natural stones, have micro-porosities and surface roughness that can cause surface staining and make cleaning very difficult.
- In these cases, it is advisable to perform a spot test and in any case, avoid using grouts with contrasting or very dark colours
- Do not use the product for widths greater than 20 mm
- Do not use the product for applications not stated in this technical sheet
- If in doubt, contact the Litokol S.p.A Technical Help Service.

SAFETY INFORMATION

Consult the product safety data sheet, available on request.
PRODUCT FOR PROFESSIONAL USE

ITEM SPECIFICATION

#The high-resistance grouting of ceramic and porcelain tiles, porcelain stoneware, low thickness slabs, marble and natural stones will be carried out with a mineral grout, compliant with standards UNI EN 13888 and ISO 13007-3 - class CG2 WA, such as Stylegrout Tech by Litokol S.p.A.
The joints must be dry and clean without any adhesive residue and brittle parts. Apply the grout with a hard rubber float; final cleaning must be carried out with dedicated sponges and clean water. A joint width equal to ____ mm and tile size equal to ____ x ____ cm determines an average yield of \approx ____ kg/m². The existing expansion and divider joints must be respected.

IDENTIFICATION DATA

Appearance	Powder
Colour	See colour chart
Customs code	38245090
Shelf life	Sacchetto da 3 kg. 36 mesi negli imballi originali in luogo asciutto. Teme il gelo.

APPLICATION DATA

Mix ratio	Water = 26-28% (approx. 0.8 litres of water per 3 kg bag)
Consistency of mix	Creamy thixotropic mortar
Mix curing time	3 minutes
pH of mix	13
Specific gravity of mix	1.94 kg/dm ³
Pot life	Approx. 50 minutes
Joint width	From 0 to 20 mm
Application	Grout rubber float
Application temperatures	From +5°C to +35°C
Waiting time for cleaning	Approx. 20 minutes
Set to light foot traffic	6 hours
Ready for use	24 hours - Swimming pools 7 days
Temperature of use	From -30°C to +80°C
How to clean equipment	With water when product is fresh. Mechanically when product has set.

CONSUMPTION TABLES

CONSUMPTION AS GROUT kg/m ²									
Length	Width	Thickness	Joints (mm)						
A (mm)	B (mm)	C (mm)	1	2	3	4	5	7	10
10	10	4	1.28	2.56	3.84				
10	10	10	3.2	6.4	9.6				
15	15	4	0.85	1.71	2.56				
15	15	10	2.13	4.27	6.4				
15	30	8	1.28	2.56	3.84				
20	20	4	0.64	1.28	1.92				
23	23	8	1.11	2.23	3.34				
25	25	10	1.28	2.56	3.84				
50	50	4	0.26	0.51	0.77				
50	50	10	0.64	1.28	1.92				
100	100	8	0.26	0.51	0.77	1.02	1.28	1.79	2.56
125	240	12	0.23	0.47	0.7	0.93	1.17	1.64	2.34
150	150	6	0.13	0.26	0.38	0.51	0.64	0.9	1.28
150	150	8	0.17	0.34	0.51	0.68	0.85	1.19	1.71
200	200	8	0.13	0.26	0.38	0.51	0.64	0.9	1.28
300	300	8	0.09	0.17	0.26	0.34	0.43	0.6	0.85
300	600	10	0.08	0.16	0.24	0.32	0.4	0.56	0.8
400	400	10	0.08	0.16	0.24	0.32	0.4	0.56	0.8
450	450	10	0.07	0.14	0.21	0.28	0.36	0.5	0.71
600	600	10	0.05	0.11	0.16	0.21	0.27	0.37	0.53
300	300	14	0.15	0.3	0.45	0.6	0.75	1.05	1.49
135	800	10	0.14	0.28	0.42	0.55	0.69	0.97	1.39
200	800	10	0.1	0.2	0.3	0.4	0.5	0.7	1
400	800	10	0.06	0.12	0.18	0.24	0.3	0.42	0.6
110	900	10	0.16	0.33	0.49	0.65	0.82	1.14	1.63
150	900	10	0.12	0.25	0.37	0.5	0.62	0.87	1.24
225	900	10	0.09	0.18	0.27	0.36	0.44	0.62	0.89
300	900	10	0.07	0.14	0.21	0.28	0.36	0.5	0.71
600	900	10	0.04	0.09	0.13	0.18	0.22	0.31	0.44
500	1000	3.5	0.02	0.03	0.05	0.07	0.08	0.12	0.17
1000	1000	3.5	0.01	0.02	0.03	0.04	0.06	0.08	0.11
1000	3000	3.5	0.01	0.01	0.02	0.03	0.04	0.05	0.07
100	1200	10	0.17	0.35	0.52	0.69	0.87	1.21	1.73
200	1200	10	0.09	0.19	0.28	0.37	0.47	0.65	0.93
300	1200	10	0.07	0.13	0.2	0.27	0.33	0.47	0.67
600	1200	10	0.04	0.08	0.12	0.16	0.2	0.28	0.4
300	1200	6	0.04	0.08	0.12	0.16	0.2	0.28	0.4
600	1200	6	0.02	0.05	0.07	0.1	0.12	0.17	0.24
1200	1200	6	0.02	0.03	0.05	0.06	0.08	0.11	0.16
1200	2400	6	0.01	0.02	0.04	0.05	0.06	0.08	0.12

CALCULATION OF CONSUMPTION

FORMULA FOR CALCULATION OF CONSUMPTION: $(A+B)/(A \times B) \times C \times D \times 1.6 = \text{kg/m}^2$

A = tile length (in mm)

B = tile width (in mm)

C = tile width (in mm)

D = joint width (in mm)

In regards to the calculation of consumption for the different tile sizes and joint widths, refer to the product calculator available at www.litokol.it

PERFORMANCE

Compliance	EN 13888 – ISO 13007	CG2 WA
Resistance to abrasion	≤ 1000 mm ³	EN 12808-2
Compressive strength after 28 days	≥ 15.0 N/mm ²	EN 12808-3
Compressive strength after freeze/thaw cycles	≥ 15.0 N/mm ²	EN 12808-3
Flexural strength after 28 days	≥ 2.5 N/mm ²	EN 12808-3
Flexural strength after freeze/thaw cycles	≥ 2.5 N/mm ²	EN 12808-3
Shrinkage	≤ 3 mm/m	EN 12808-4

Water absorption after 30 minutes	≤ 2 g	EN 12808-5
Water absorption after 240 minutes	≤ 5 g	EN 12808-5
Resistance to alkalis	Excellent	
Resistance to solvents	Excellent	
Resistance to acids	Good resistance against acids with pH > 3	

COLOUR CHART

White 1	Ivory 1
White 2	Ivory 2
Silver 1	Ivory 3
Silver 2	Beige 1
Silver 3	Beige 2
Black 1	Beige 3
Black 2	Beige 4
Grey 1	Brown 1
Grey 2	Brown 2
Grey 3	Brown 3

NOTES

Data detection at temperature +23 °C, R.H. 50% and with no wind. May vary depending on the specific conditions of the installation site.

The colours and images of the products are intended purely as a guideline and do not necessarily constitute a faithful representation of the originals.

Data sheet **n. 330**
Revision **n. 0**
Date: **January 2021**

The information and provisions contained in this technical data sheet reflect our best experience. Given the impossibility of directly intervening on the conditions of the work site and execution of the works, they represent indications of a general nature, which are in no way binding on our Company. It is therefore recommended to perform a spot test in order to check the suitability of the product for the intended use. In any case, those who intend to use the product must establish whether or not it is suitable for the intended use, and in any case assume all liability for any consequences resulting from such use.

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