

# Fugakolor 1-20 mm

**MINERAL SEALANT WITH SMOOTH FINISH, HIGH WORKABILITY AND EASY TO CLEAN, GUARANTEED FOR PROFESSIONAL ANTI-SHRINK, WATER-REPELLENT, MOULD-PROOF GROUTING, WITH HIGH RESISTANCE TO ABRASION, OF CERAMIC GROUTS FROM 1 TO 20 mm, PORCELAIN STONE GLASS AND MARBLE, LARGE SIZES, NATURAL STONES. FOR INTERIORS AND EXTERIORS.**



TECHNICAL DATA SHEET - REV. 01/2022

## DESCRIPTION

FUGAKOLOR 1-20 mm is a mixture composed of hydraulic binders, selected mineral fillers, synthetic resins and special additives that give it high workability, excellent final mechanical strength and water repellency. Mixed with water it turns into a product that is easy to apply and easy to clean for anti-shrinkage and anti-mould grouting with a smooth finish of ceramic floors and coatings. After complete hardening, it has excellent colour stability and high abrasion resistance.

**Conforms to European Standard EN 13888 - Class CG2WA · Improved cement (CG) sealant (2) with additional features of reduced water absorption (W) and high abrasion resistance (A).**

## FIELDS OF APPLICATION

FUGAKOLOR 1-20 mm is used for filling joints from 1 mm up to 20 mm in width between ceramic tiles of floors and walls. Suitable for grouting, indoors and outdoors, joints between ceramic tiles of all kinds, porcelain and marbled stoneware, low thickness slabs, large formats, clinker, terracotta, glass and marble mosaics, natural stones, mosaics in the pool and on external facades. Whenever special leakage stresses are expected (such as in floors or boat linings) or in the case of fillings of pre-engraved material, mix FUGAKOLOR 1-20 mm with the GIUNTOLASTIC liquid polymer additive in total or partial replacement of the mixing water, checking the cleanability of the surface in advance.

## PREPARATION OF JOINTS

The joints can be sealed at least 24/36 hours after laying the floor and in any case verifying that the waiting times indicated in the technical data of the adhesive used have elapsed. In the case of floors laid with traditional mortar, wait for the product to dry completely (at least 10 days). An excess of residual moisture present between the joints can lead to different hardening times of the sealing grout, with the possible formation of whitish efflorescence or variations in the final colour due to the migration to the surface of soluble salts brought on by the residual moisture of the substrate. The joints to be sealed must be free of dust and residues of adhesive or cement throughout the thickness of the coating, in order to have the most uniform depth possible. Different thicknesses would result in different drying times with possible variation of the final colouring. Remove any spacers used for laying the coating.

On tiles with polished surfaces or microporous glazes, carry out a preliminary cleanability test on a small portion of the surface. Evenly moisten the joints before applying FUGAKOLOR 1-20 mm, avoiding stagnation of water, can facilitate application and help increase mechanical strength. In the case of very porous tiles with a thickness greater than 8 mm (water absorption greater than 10%) dampen the joints well before applying the stucco.

## APPLICATION

When preparing the mixture, strictly adhere to the dosages indicated on the packaging. An overdosage of water or fractional mixing with different consistencies can cause an uneven colouring of the surface.

Pour 25 kg of FUGAKOLOR 1-20 mm into a clean container containing roughly 5.5 litres of clean water (for the 5 kg packs use 1.1-1.2 litres of water) and mix with an electric mixer on low, to avoid excessive trapped air, until a homogeneous and lump-free paste is obtained. Allow the mixture to rest for a few minutes, stirring briefly before use. Apply the sealant with a smooth rubber spatula or hard rubber squeegee, compressing it inside the joints until they are completely filled, without leaving gaps or unevenness. In order to ensure a homogeneous finish, remove the fresh excess stucco by working diagonally to the tiles. Wait for the surface of the stucco to become opaque before proceeding with the final cleaning. Adhering to cleaning times avoids the formation of whitish efflorescence. The waiting time required varies considerably depending on the environmental conditions, the type of material laid and the degree of absorption of the substrate (indicatively, the waiting time is at least 30 minutes with porcelain tiles at a temperature of 20 °C). Clean the stucco residue with a large damp sponge washed frequently in clean water, working with rotary movements to avoid digging the joints, avoiding creating stagnation of water above the fresh joints. This can also be done with a belt sponge machine. A slight residual veil of clean water on the surface can prevent possible colour variations. Once the product is well hardened, remove any remaining residue using an abrasive sponge, such as Scotch-Brite, or a dry cloth to remove traces of dust. In the event that the surface of the coating is still dirty due to an inadequate cleaning technique, intervene using the PULINET descaling detergent, at least 10 days after sealing the joints. Must never be used on limestone or marble surfaces.

In the first 3 days following the sealing of the joints, protect the covering avoiding water deposits on the joints, even though condensation of environmental humidity.

## YIELD

INDICATIVE YIELD (kg/m <sup>2</sup> )						
according to the size of the tiles, the thickness of the tiles and the width of the joints						
FORMAT (cm)	THICKNESS (mm)	JOINTS WIDTH (mm)				
		2	3	4	5	6
2 x 2	3	0,85	1,30	1,70	2,10	2,50
2,5 x 2,5	3	0,70	1,00	1,35	1,70	2,00
5 x 5	4	0,45	0,67	0,90	1,10	1,34
20 x 20	8	0,22	0,34	0,45	0,56	0,68
20 x 20	14	0,40	0,60	0,78	1,00	1,20
30 x 30	10	0,18	0,28	0,38	0,47	0,56
40 x 40	10	0,14	0,21	0,28	0,35	0,42
50 x 50	10	0,11	0,17	0,23	0,28	0,34
30 x 60	10	0,14	0,21	0,28	0,35	0,42
60 x 60	10	0,10	0,14	0,19	0,23	0,28
20 x 80	10	0,18	0,26	0,35	0,44	0,52
15 x 90	10	0,22	0,33	0,44	0,55	0,65
15 x 120	10	0,21	0,32	0,42	0,52	0,63
45 x 90	10	0,10	0,14	0,19	0,24	0,28
60 x 120	6	0,04	0,06	0,08	0,10	0,13
60 x 120	10	0,07	0,10	0,14	0,18	0,21
40 x 120	6	0,06	0,08	0,12	0,14	0,17
120 x 120	12	0,06	0,08	0,12	0,14	0,17

### FORMULA FOR CALCULATING SEALANT YIELD:

$$\left(\frac{A+B}{A \times B}\right) \times C \times D \times 1,4 = \frac{kg}{m^2}$$

Legend:

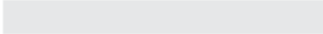
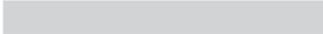

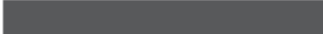
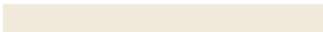
A and B = tile side dimensions (in mm)

C = thickness of the tile (in mm)

D = width of the joint (in mm)

1.4 = specific weight of sealant in kg/dm<sup>3</sup>

## COLOUR CHART

	07 silver
	06 manhattan
	25 grigio cemento
	26 antracite
	02 jasmin

N.B. The colours shown above are purely indicative and may have slightly different shades from the original ones of the product for printing reasons.

## RECOMMENDATIONS

- ◆ Do not use FUGAKOLOR 1-20 mm for filling joints with a width greater than 20 mm.
- ◆ Do not use FUGAKOLOR 1-20 mm for grouting floors and walls in the food, pharmaceutical, hospitals, canteens and in all cases where regulations require sealing with antacid products or when high thermal resistances are required.
- ◆ Always adhere to the recommended mixing ratio, do not add excess water to the mixture to make the filler more fluid as it would greatly reduce the mechanical strength and the dry grouting could be dusty and uneven in colour. Always make the mixtures with the same amount of water, so as to avoid differences in shades on the dry product.
- ◆ Always adhere to the indicated aging times, since early cleaning could cause the partial emptying of the joint, while an excessive delay would force to use abrasive means to remove the hardened filler, with the risk of damaging the surface of the coating.
- ◆ It is advisable to always carry out a preliminary test with an unlaidd tile in order to verify its porosity and cleaning difficulty; if necessary, provide a protective treatment on the surface of the tiles.
- ◆ Do not use the product where there is a risk of frost in the following 48 hours.

## PACKAGING

FUGAKOLOR 1-20 mm is supplied in:

- ◆ 5 kg polyethylene bags in 25 kg boxes (900 kg pallets). Store the product in dry environments and in the original packaging tightly closed. Under these conditions its stability is at least 24 months;
- ◆ 25 kg polythene paper bags on 1500 kg pallets (GRIGIO CEMENTO and MANHATTAN only.) Store the product in dry environments and in the original packaging tightly closed. Under these conditions its stability is at least 12 months.

## SAFETY INSTRUCTIONS

The product contains cement which, if in contact with body sweat, produces an irritating and sensitizing alkaline reaction to the skin. Wear suitable clothing, gloves and protective goggles.

For more information on the safe use of the product, refer to the relevant Safety Data Sheet.

## ITEM SPECIFICATIONS

Professional anti-shrinkage, water-repellent, anti-mould grouting, with high abrasion resistance, of joints from 1 to 20 mm in width between ceramic tiles of all types, by applying a mineral sealant with a smooth finish, highly workable and easy to clean, classified as CG2WA from the EN 13888 standard, such as **FUGAKOLOR 1-20 mm** by COLMEF Srl.

## TECHNICAL DATA

<b>Compliant with the Standard:</b>	<b>EN 13888</b>
<b>Class:</b>	<b>CG2WA</b>
Appearance:	powder
Colour:	see colour chart
Mixing ratio:	~ 5.5 litres of water per 25 kg of powder 1.1-1.2 litres of water per 5 kg of powder
Specific weight of the mixture (kg/dm <sup>3</sup> ):	1.40
pH value:	11
Duration of mixture:	≥ 40 mins.
Execution of joints: - floor laid with adhesive - floor laid with quick grip adhesive - floor laid with traditional mortar - coating laid with adhesive	24/36 h 3/6 h 10 days 6-8 h
Waiting time for cleaning:	~ 30 min. (depending on the absorption of the surface and the laid material)
Walkability:	24 h
Put into service:	7 days
Permissible application temperature:	from +5 °C to +35 °C
Operating Temperature:	-30 °C to +90 °C

## FINAL PERFORMANCE according to EN 13888 Class CG2WA

	<b>Results</b>	<b>Test method</b>
Compressive strength 28 days (N/mm <sup>2</sup> ):	≥ 15	EN 13888
Compressive strength after freeze-thaw cycles (N/mm <sup>2</sup> ):	≥ 15	EN 13888
Bending strength 28 days (N/mm <sup>2</sup> ):	≥ 2.5	EN 13888
Compressive strength after freeze-thaw cycles (N/mm <sup>2</sup> ):	≥ 2.5	EN 13888
Abrasion resistance (³mm):	≤ 1000	EN 13888
Water absorption after 30 min. (g):	≤ 2	EN 13888
Water absorption after 240 min. (g):	≤ 5	EN 13888
Resistance to humidity:	excellent	
Resistance to ageing:	excellent	

DATA DETECTION AT +23°C - 50% R.H. AND IN ABSENCE OF VENTILATION

The information in this bulletin is based on our best experience. We cannot be held liable for any product misuse. We therefore recommend anyone who intends to use this product to assess whether it is suitable for the intended application and to perform preliminary tests in any case. Always refer to the latest updated version of the technical data sheet available at [www.colmef.com](http://www.colmef.com).

**FOR MORE INFORMATION OR PARTICULAR USES, CONTACT THE COLMEF TECHNICAL SUPPORT DEPARTMENT.**

**COLMEF SRL | Z.I. Ponte d'Assi | 06024 - Gubbio (PG) ITALY | Tel. +39 075923561 | [info@colmef.com](mailto:info@colmef.com) | [www.colmef.com](http://www.colmef.com)**