

# Fugabella® Eco Porcelana 0-5

**Certified, eco-friendly, naturally bacteriostatic and fungistatic, stabilized mineral grout containing pure natural NHL 5 lime for extremely colour-fast joints from 0 mm to 5 mm in thickness, ideal for use in GreenBuilding. Single-component with very low volatile organic compound emissions, contains recycled raw materials. Recyclable as an inert material at the end of its life.**

Fugabella® Eco Porcelana 0-5 develops an extra-fine, micro grain finish with scratch-proof surface hardness which enhances the reflected light effect ensuring it blends seamlessly with the design of vitrified and ceramic tiles, glass mosaic and natural stone.



## GREENBUILDING RATING®

### Fugabella® Eco Porcelana 0-5

- Category: Inorganic Mineral Products
- Class: Mineral grouts
- Rating\*: Eco 3

\* Rating based on average colour formulations

	Regional Mineral > CO <sub>2</sub>	Recycled	Regional Mineral > 30%	CO <sub>2</sub> ≤ 250 g/kg	Low Emission	IAQ VOC	Recyclable
	Recycled mineral content 47%			Very low VOC emissions	Can be recycled as inert material		

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

## PRODUCT STRENGTHS

- Floors and walls, for internal and external use
- Water-repellent and low absorption
- High CATAS-tested colour fastness
- Colour uniformity
- Three collections of 28 colours: Classic, Design and Colors
- Ideal for grouting rectified tiles
- Suitable for vitrified tiles, ceramics, low thickness slabs and natural stone
- Easy to clean and maintain
- Suitable for underfloor heating systems



## ECO NOTES

- Contains recycled materials thereby reducing the damage to the environment caused by extracting pure raw materials
- Natural bacteriostatic product stabilized with pure natural lime to avoid the use of pesticide additives

## AREAS OF USE

### Use

High-performance grouting, from 0 to 5 mm, with extra-fine finish, high degree of hardness and reduced water absorption.

### Materials to be grouted:

- vitrified tiles, low thickness slabs, ceramic tiles, klinker, cotto, glass and ceramic mosaic, of all types and formats
- natural stone, recomposed materials, marble

Internal and external flooring and walls, in domestic, commercial and industrial applications and street furniture, in environments subject to heavy traffic, swimming pools, baths and fountains, also in areas subject to thermal shock and freezing.

### Do not use

On joints more than 5 mm in width, on floors and walls where specific chemical resistances or absolutely no water absorption are required; to grout elastic expansion or fractionising joints; on substrates which are highly deformable, not perfectly dry or subject to moisture rising.

## INSTRUCTIONS FOR USE

### Preparation of substrates

Before grouting joints, check that tiles have been fixed correctly and are anchored perfectly to the substrate. Substrates must be perfectly dry. Grout joints in accordance with the recommended waiting time indicated on the relative data sheet for the adhesive used. For mortar surfaces, wait at least 7 – 14 days depending on screed thickness, ambient weather conditions and on the level of absorption of the covering and the substrate.

Any water or moisture rising can cause salt to build up on the surface of the grout or cause shade variations on account of the uneven evaporation of remaining water through the grout.

Joints must be free from any excess adhesive, even if already hardened, and must be of an even depth of at least 2/3 of the overall thickness of the tile covering. This is necessary to prevent different drying times of each different thickness, with subsequent shade variations.

Any dust and loose debris must be removed from the joints by carefully cleaning them with a vacuum cleaner. In the case of highly absorbent tiles or high temperatures, a damp sponge should be passed across the surface of the tilework prior to grouting joints, in order to prevent any water stagnation.

Before grouting joints with contrasting colours, check the cleanability, as highly porous surfaces may make cleaning difficult. It is advisable to perform a preliminary test on tiles not to be laid or in a small, concealed area. In these cases we recommend treating the covering with specific protective products, being careful to avoid applying them to the joints.

### Preparation

Prepare Fugabella® Eco Porcelana 0-5 in a clean container, first of all pouring in a quantity of water equal to approximately ¾ of the amount required. Gradually add Fugabella® Eco Porcelana 0-5 to the container, mixing the paste from the bottom upwards with a low-rev (~ 400/min) helicoidal agitator. Add more water until the desired consistency is obtained. The mixture must be of smooth consistency and without any lumps. For best results, and to mix larger quantities of the grout, a stirring device with vertical blades and slow rotation is recommended. Specific polymers with high-dispersion properties ensure that Fugabella® Eco Porcelana 0-5 is immediately ready for use. The amount of water to be added, indicated on the packaging, is an approximate guide and will vary depending on the different colours. It is possible to obtain mixtures with consistency of variable creamy effect according to the application to be made. Adding extra water does not improve the workability and the cleanability of the grout, and may cause shrinkage in the plastic phase of drying and result in less effective final performance. Prepare all mixtures required to complete the process using the same amount of water, in order to avoid any variations in grout shade.

### Application

Fugabella® Eco Porcelana 0-5 must be applied evenly on the tile covering with a trowel or hard rubber float. Seal the entire surface by completely grout the joints, applying the grout diagonally to the tiles. Remove most of the excess grout immediately, leaving only a thin film on the tile.

### Cleaning

Begin cleaning the tilework when the grout starts to become hard into the joint. On completion, clean up the surface using a thick, large-sized sponge damped in clean water to avoid removing grout from the joints. Make sure clean water is used at all times, using appropriate trays with grills and cleaning rollers for the sponge. Use circular movements to soften the film of hardened grout on the tiles and finish cleaning the joint surface. An electric sponge grout remover is recommended for large surface areas. Finish cleaning up by dragging the sponge diagonally across the tiles while applying water evenly over the tiles, in order to prevent any shade variations. When fixing tiles with very narrow joints, grout can be cleaned from the latter using a stick with a rounded tip, being careful to clean the surface of the covering with a clean cloth or sponge before the product hardens. Residual traces of grout can be removed from tools with water before the product has hardened.

## SPECIAL NOTES

The partial or full replacement of mixing water with Fugaflex Eco eco-friendly, flexibilizing latex for cement-based grouts, gives increased flexibility to Fugabella® Eco Porcelana 0-5, reduces the elastic modulus, increases resistance to water and substrate adhesion. Its use is recommended in the following specific applications: fixing on wooden floors, fixing on substrates or using materials with high thermal expansion or where surfaces are to be subsequently smoothed.

Before grouting highly porous surface coverings, or at high temperatures, it is advisable to wipe a damp sponge over the surface to counteract the porosity or to cool the surface, being careful not to cause water to stagnate in the joints.

## ABSTRACT

*Certified, high-performance grouting of ceramic tiles, vitrified tiles, low thickness slabs, marble and natural stone with eco-friendly, naturally bacteriostatic and fungistatic mineral grout with high colour fastness, compliant with standard ISO 13007-3 - class CG2 WA, GreenBuilding Rating® Eco 3, such as Fugabella® Eco Porcellana 0-5 by Kerakoll Spa. Joints must be dry and free from traces of adhesive and loose debris. Use a trowel or hard rubber float to apply the grout and suitable sponges and clean water to clean joints on completion. Joints of \_\_\_\_ mm width and tiles \_\_\_\_ x \_\_\_\_ cm in size will give an average coverage of approx. \_\_\_\_ kg/m<sup>2</sup>. Existing elastic expansion and fractionizing joints must be respected.*

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	Coloured pre-mixed	
Apparent volumetric mass	≈ 1,23 kg/dm <sup>3</sup>	UEAtc/CSTB 2435
Mineralogical nature of inert material	crystalline carbonate	
Average granulometric composition	≈ 50 µm	
Shelf life	≈ 12 months in the original packaging in dry environment	
Pack	bags 20 / 5 kg	
Mixing water	≈ 5,7 l / 1 bag 20 kg - ≈ 1,5 l / 1 bag 5 kg	
Specific weight of the mixture	≈ 2 kg/dm <sup>3</sup>	UNI 7121
Pot life	≥ 90 min.	
Temperature range for application	from +5 °C to +35 °C	
Width of joints	from 0 to 5 mm	
Foot traffic	≈ 12 – 24 hrs	
Grouting after fixing:		
- with adhesive	see characteristics of adhesive	
- mortar	≈ 7 – 14 days	
Interval before normal use	≈ 3 days	
Coverage	see Coverage table	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e. temperature, ventilation and absorbency level of the surface and of the materials fixed.

## COVERAGE TABLE

	Format	Thickness	grammes/m <sup>2</sup> joint width		
			1 mm	3 mm	5 mm
Mosaic	25x25 mm	3 mm	≈ 430	≈ 1290	≈ 6450
	50x50 mm	4 mm	≈ 295	≈ 885	≈ 4425
Natural stones, Glaze, Ceramic and Vitrified Tiles	100x100 mm	6 mm	≈ 220	≈ 660	≈ 3300
	100x150 mm	6 mm	≈ 185	≈ 555	≈ 2775
	200x100 mm	6 mm	≈ 165	≈ 495	≈ 2475
	300x300 mm	7 mm	≈ 90	≈ 270	≈ 1350
	300x450 mm	9 mm	≈ 95	≈ 285	≈ 1425
	300x600 mm	9 mm	≈ 85	≈ 255	≈ 1275
	600x600 mm	10 mm	≈ 65	≈ 195	≈ 975
	1000x1000 mm	12 mm	≈ 45	≈ 135	≈ 675
	1200x600 mm	16 mm	≈ 75	≈ 225	≈ 1125
	1200x2400 mm	16 mm	≈ 40	≈ 120	≈ 600
	1800x900 mm	25 mm	≈ 80	≈ 240	≈ 1200
	1800x1200 mm	25 mm	≈ 65	≈ 195	≈ 975

## PERFORMANCE

### VOC INDOOR AIR QUALITY (IAQ) - VOLATILE ORGANIC COMPOUND EMISSIONS

Conformity	EC 1-R plus GEV-Emicode	GEV certified 1959/11.01.02
<b>HIGH-TECH</b>		
Flexural strength after 28 days	≥ 7 N/mm <sup>2</sup>	EN 12808-3
Compressive strength after 28 days	≥ 27 N/mm <sup>2</sup>	ISO 13007-4.1.4
Resistance to frost-thaw cycles:		
- Flexural	≥ 2,39 N/mm <sup>2</sup>	EN 12808-3
- Compressive	≥ 27 N/mm <sup>2</sup>	EN 12808-3
Resistance to abrasion after 28 days	≤ 265 mm <sup>3</sup>	EN 12808-2
Water absorption after 30 min.	≤ 1,3 g	EN 12808-5
Water absorption after 240 min.	≤ 3,5 g	EN 12808-5
Colour Fastness	see colour chart	UNI EN ISO 105-A05
Resistance to fungal contamination	class F+	CSTB SB-08-103
Resistance to bacterial contamination	class B+	CSTB SB-2008-097
Working temperature	from -40 °C to +90 °C	
Conformity	CG2 WA	ISO 13007-3
<b>LEED®</b>		
LEED® Points Contribution*	LEED® Points	
MR Credit 4 Recycled materials content	up to 2	GBC Italia
QI Credit 4.1 Low-Emitting Materials	up to 1	GBC Italia

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

\* LEED® is an environmental performance measurement system designed for new and existing commercial, institutional, and residential buildings, based on energy and environmental principles commonly recognized and accepted by the international scientific community. The LEED® building sustainability assessment system is a voluntary system. To calculate the score, consult the rules provided by the Italy LEED® Manual (edition 2009). © 2010, Green Building Council Italy, U.S. Green Building Council, all rights reserved

## COLOUR CHART

	Colours Fugabella® Eco Porcelana 0-5	Colour Fastness*
		GSc (Daylight) Standard EN ISO 105-A05
01 White		4
02 Light Grey		4
03 Pearl Grey		4,5
04 Iron Grey		4,5
05 Anthracite		4,5
06 Black		4,5
07 Jasmin		3,5
08 Bahama Beige		4
09 Caramel		4,5
10 Terracotta		4,5
11 Brown		4,5
12 Walnut		5
51 Silver		3,5
50 Pergamon		4,5
46 Ivory		4,5
45 Limestone		4,5
52 Dove Grey		4,5
44 Cement Grey		4,5
48 Coffee		4,5
38 Husky		2
47 Mediterranean		1
15 Ocean		4,5
41 Eucalyptus		4,5
49 Moss		5
20 Magnolia		5
27 Sunset		3
21 Red		3
23 Yellow		3

Legend    from 5 to 4    high colour fastness; for internal and external use  
               from 3,5 to 3    good colour fastness; for internal and external use  
               from 2,5 to 1    limited colour fastness; for internal use

*The hues shown are intended as an indication only.*

## WARNING

### - Product for professional use

- abide by any standards and national regulations
- in swimming pools, check the suitability of the product based on the type of water and the type of chemical or physical treatment used
- workability times may vary considerably, depending on environmental conditions and on tile and surface absorbency
- grouting joints on substrates that are still damp will cause variations in the grout
- use a moistened sponge to clean surfaces in which joints have already been grouted to rehydrate the applied grout
- use a trowel and apply with a series of passes to ensure proper penetration of the grout in the reduced-thickness joints
- protect the grout from direct rainfall and sun for at least 12 hours after application
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll India Helpline (Toll Free) 1800-200-6550 - info@kerakollindia.com

The Eco and Bio classifications refer to the GreenBuilding Rating® Manual 2012. This information was last updated in April 2015 (ref. GBR Data Report - 05.15); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see [www.kerakoll.com](http://www.kerakoll.com). KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.

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