

Fugalite

Certified, vitrified, high-slide, easy-to-clean grout and adhesive, bacteriostatic and fungistatic, water and stain proof for joints of between 0 and 10 mm with a high level of chemical and mechanical resistance, guarantees the continuity of ceramic surfaces.

Fugalite is a liquid ceramic for the smooth, unbroken grouting of all ceramic and glass mosaic coverings. Available in 3 colour collections with a total of 28 different shades and allowing unlimited creative potential and original combinations as well as a striking finish.



Rating 1

1. Internal floors and walls
2. Suitable for ceramic tiles and glass mosaic
3. Guarantees the lasting performance of ceramics and a totally even colour
4. Ideal to bond and grout glass mosaic
5. Impermeable to water, stains and dirt
6. Prevents the development of mould and bacteria
7. Complies with HACCP/EC 852/2004 requirements for food hygiene
8. Approved for marine use
9. Bacteriostatic and fungistatic product (CSTB method)*

- × Regional Mineral $\geq 30\%$
- × VOC Low Emission
- × Solvent ≤ 5 g/kg
- × Low Ecological Impact
- ✓ Health Care

kerakoll

*Test eseguiti secondo metodo CSTB, Contaminazione batterica e fungina

Areas of application

→ Use

Water-resistant grouting of joints with high chemical and mechanical resistance and a high level of hardness; bonding of glass mosaic.

Materials to be grouted:

- porcelain tiles, low thickness slabs, ceramic tiles, klinker, cotto, glass and ceramic mosaic, of all types and formats
- recomposed materials

Flooring and walls in indoor, domestic, commercial and industrial applications and street furniture subject to permanent or occasional contact with chemical substances, in environments subject to heavy traffic, swimming pools, thermal water baths and fountains, heated floors, also in areas subject to thermal shock and freezing.

→ Field of application Directive CE MED

Ceramized grout and adhesive used as adhesive and/or as sealant between tiles.

Maximum mass per area 1405 g/m²

Thickness as adhesive layer 0.9 ± 0.1 mm

Thickness as sealant between tiles 3.9 ± 0.1 mm

As finishing material for all exposed interior and concealed or inaccessible surfaces. When intended for bulkhead and ceiling, the product may be applied to any non-combustible support having a thickness equal or greater than 10 mm and a density ≥ 656 kg/m³. When intended for decks the product may be applied to any metallic support, any non combustible support an any material having low flame spread characteristics.

Do not use on porous flooring for which more specific or alternative chemical resistances are required compared with those listed in the chemical resistances table, to grout elastic expansion or fractionizing joints or on substrates that are not fully dry and subject to moisture rising.

Instructions for use

→ Preparation of substrates

- As a grout: before grouting joints, check that tiles have been laid 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 substrates, 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 vapour pressure to accumulate, which may in turn loosen the tiles on account of the complete non-absorbency of the grout or of the tiles themselves. Joints must be free from any excess adhesive, even if already hardened. Furthermore they must be of an even depth for the whole width of the tile covering, thereby ensuring maximum chemical resistance. Any dust and loose debris must be removed from joints by carefully cleaning them with vacuum cleaner. The surface of the coating material to be grouted must be dry and free from dust or building dirt; any residual protective coatings must first be removed using specific products.
- Before grouting joints, check the cleanability of the tile covering, as porous or highly micro-porous surfaces may cause 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.

- As an adhesive: substrates must be compact and solid, free of dust, oil and grease, dry and free from moisture rising, with no loose debris or flaky parts such as residues of cement, lime and paint coatings, which must be completely removed. The substrate must be stable, without cracks and have already completed the curing period of hygrometric shrinkage. Uneven areas must be corrected with suitable smoothing and finishing products. On screeds and renders/plasters which are highly absorbent and have dusty, flaky surfaces, it is advisable to first apply Active prime Fix, following the instructions provided in the technical data sheet, in one or more coats according to the instructions, in order to reduce the water absorption and improve spreadability of the adhesive.

→ Preparation

Fugalite is prepared by mixing together parts A and B from the bottom upwards, using a low-rev (≈ 400/min.) helicoidal agitator, respecting the preset ratio of 2.82 : 0.18 of the packs. Pour part B into the bucket containing part A, being careful

Instructions for use

to mix the two parts uniformly until a smooth, even coloured mixture is obtained. In any case, mix only enough grout that can be used in full within 45 min. at +23 °C, 50% R.H.

Fugalite product buckets must be stored at a temperature of approx. +20 °C for at least 2-3 days before use. Higher temperatures make the mixture too fluid and shorten hardening times, while lower temperatures make the mixture harder to spread and slow down setting times. At temperatures of less than +5 °C, the product will no longer set.

- Application as grout: Fugalite must be applied evenly on the tile covering with a hard rubber spreader. Grout material has to be completely filled between entire joint areas, the application has to be done diagonally with respect to the joints. If grouting is to be on joints only, it is recommended that a test be carried out in advance before laying to ensure the surface can be properly cleaned. Remove most of the excess grout immediately using the spreader, leaving only a thin film on the tile.
- Cleaning as grout: begin cleaning the tilework when the grout is still fresh. On completion, clean up the surface using a thick, large-sized sponge, preferably made of cellulose, damped in clean water to avoid removing grout from the

joints. Use circular movements to soften the film of grout on the tiles and finish cleaning the joint surface. Specific high-dispersion polymers ensure all grout residues are removed using only a small amount of water. The use of an excessive amount of water when cleaning would impair the final chemical resistances.

It is important to rinse frequently and make sure clean water is used at all times, using appropriate trays and grills with cleaning rollers (wash-boy). If necessary, replace the sponge or felt cleaning pad when saturated with grout. Final cleaning should be done, by sponge applied in a diagonal directions to avoid material coming out from the joints. Wipe the cleaned surface again with a dry cloth to make sure it is completely clean and there are no streaks of resin remaining. Once the grout has dried, any streaks can be removed using Fuga-Soap Eco, to be diluted in accordance with the working time and the amount of grout to be removed. do not walk on floors that are still damp as dirt could still stick to them.

Special notes

- Adding Fuga-Wash Eco to the cleaning water gives a better detergent action on coating materials, keeps the sponge cleaner, improves

the surface finish of grouting and cleans effectively without the need for rinsing.

Certificates and marks



* Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

**The Italian Ceramic Center- Bologna (Centro Ceramico Bologna) has carried out a stain resistance test according to UNI EN ISO 10545-14 (Test Report no. 3686/11)

Abstract

High chemical and mechanical resistance grouting of ceramic tiles, porcelain tiles and glass mosaic using a certified, high-slide, easy-to-clean vitrified grout that is bacteriostatic and fungistatic, water and stain proof with a high level of chemical and mechanical resistance and GreenBuilding Rating 1, such as Fugalite by Kerakoll Spa***. Joints must be dry and free from traces of adhesive and loose debris. Use a spreader 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/m². Existing elastic expansion and fractionizing joints must be respected.

*** Tests carried out according to CSTB method, bacterial and fungal contamination

Technical Data compliant with Kerakoll Quality Standard

Appearance	part A coloured paste / part B straw-coloured liquid	
Specific weight	Part A $\approx 1.77 \text{ kg/dm}^3$ / Part B $\approx 1.01 \text{ kg/dm}^3$	UEAtc
Viscosity	$\approx 100000 \text{ mPa} \cdot \text{s}$, rotor 93 RPM 10	Brookfield method
Mineralogical nature of inert material	silicate - crystalline (part A)	
Chemical nature	epoxy resin (part A) / polyamines (part B)	
Grading	$\approx 0 - 250 \text{ }\mu\text{m}$	
Shelf life	≈ 24 months from production in the original sealed packaging	
Warning	Protect from frost, avoid direct exposure to sunlight and sources of heat	
Pack	monopack part A 2.82 kg / part B 0.18 kg	
Mixing ratio	part A : part B = 2.82 : 0.18	
Specific weight of the mixture	$\approx 1,43 \text{ kg/dm}^3$	
Pot life at +23 °C	$\geq 45 \text{ min.}$	
Temperature range for application	from +5 °C to +30 °C	
joint width	from 0 to 10 mm	
Foot traffic	$\approx 24 \text{ hrs}$	
Grouting after laying:		
- with Fugalite on coating materials	immediate	
- with Fugalite on floors	as soon as foot traffic is allowed	
- with adhesive	see characteristics of adhesive	
- mortar	$\approx 7 - 14 \text{ days}$	
Interval before normal use	$\approx 3 \text{ days}$ (mechanical resistance) / $\approx 7 \text{ days}$ (chemical resist.)	
Coverage:		
- as an adhesive	$\approx 2 - 4 \text{ kg/m}^2$	
- as a grout	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 substrate and of the materials laid.

Coverage table							
		Format	Thickness	grammes/m² joint width			
				1 mm	2 mm	5 mm	10 mm
Mosaic		2x2 cm	3 mm	≈ 530	≈ 1.060	≈ 2.650	≈ 5.300
		5x5 cm	4 mm	≈ 290	≈ 580	≈ 1.450	≈ 2.900
Tiles		30x60 cm	4 mm	≈ 40	≈ 80	≈ 200	≈ 400
		50x50 cm	4 mm	≈ 30	≈ 60	≈ 150	≈ 300
		60x60 cm	4 mm	≈ 25	≈ 50	≈ 125	≈ 250
		100x100 cm	4 mm	≈ 15	≈ 30	≈ 75	≈ 150
		20x20 cm	8 mm	≈ 150	≈ 300	≈ 750	≈ 1.500
		30x30 cm	9 mm	≈ 110	≈ 220	≈ 550	≈ 1.100
		40x40 cm	10 mm	≈ 90	≈ 180	≈ 450	≈ 900
		30x60 cm	10 mm	≈ 90	≈ 180	≈ 450	≈ 900
		60x60 cm	10 mm	≈ 60	≈ 120	≈ 300	≈ 600
		60x90 cm	10 mm	≈ 50	≈ 100	≈ 250	≈ 500
		100x100 cm	10 mm	≈ 35	≈ 70	≈ 175	≈ 350
		120x120 cm	10 mm	≈ 30	≈ 60	≈ 150	≈ 300
		20x20 cm	14 mm	≈ 260	≈ 520	≈ 1.300	≈ 2.600
		30x30 cm	14 mm	≈ 170	≈ 340	≈ 850	≈ 1.700
Klinker		30x30 cm	15 mm	≈ 185	≈ 370	≈ 925	≈ 1.850
		12,5x24,5 cm	12 mm	≈ 270	≈ 540	≈ 1.350	≈ 2.700

Performance		
HIGH-TECH		
Static modulus of elasticity	≈ 410 N/mm ²	ISO 178
Resistance to abrasion	≈ 174 mm ³	EN 12808-2
Water absorption after 240 min.	≈ 0,04 g	EN 12808-5
Working temperature	from -40 °C to +80 °C	
Colour fastness according to UNI EN ISO 105-A05	see table	
Resistance to fungal contamination	class F+	CSTB 2011-002
Resistance to bacterial contamination	class B+	CSTB 2010-083
Porcelain tiles/concrete tensile strength	≥ 2,5 N/mm ²	EN 1348
Initial shear strength	≥ 4 N/mm ²	EN 12003
Shear strength after water immersion	≥ 3 N/mm ²	EN 12003
Open time: tensile adhesion	≥ 1,5 N/mm ²	EN 1346
Resistance to iodine stains	class 4	ISO 10545-14
Resistance to olive oil stains	class 5	ISO 10545-14
Resistance to chromium stains	class 3	ISO 10545-14

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

Chemical resistance (EN 12808-1)			
Acids	Concentration	Permanent contact	Occasional contact
Acetic	2,50%	•	...
	5%	•	..
	10%	•	•
Hydrochloric	37%	..	...
Citric	10%	...	...
Formic	2,50%	•	•
	10%	•	•
Phosphoric	50%	...	...
	75%	•	..
Lactic	2,50%	..	...
	5%	•	..
	10%	•	•

Legend

- ... Excellent
- .. Good
- poor

Values taken at: ambient +23 °C / 50% R.H. – chemical aggressive agent +23 °C

Chemical resistance (EN 12808-1)			
Acids	Concentration	Permanent contact	Occasional contact
Nitric	25%	..	..
	50%	.	.
Oleic	100%	.	.
Sulphuric	50%	...	...
	100%	.	.
Tannic	10%	..	...
Tartaric	10%	..	...
Foodstuffs	Main foodstuffs (temporary contact)		
Vinegar			..
Citrus fruits			..
Ethyl alcohol			..
Beer			...
Butter			...
Coffee			...
Casein			...
Glucose			...
Animal fat			...
Fresh milk			..
Malt			...
Margarine			...
Olive oil			...
Soya oil			...
Pectin			...
Tomato			..
Yoghurt			..
Sugar			...
Fuels and Oils		Permanent contact	Occasional contact
Petrol		.	...
Diesel oil		..	...
Coal tar oil		..	..

Chemical resistance (EN 12808-1)

Fuels and Oils		Permanent contact	Occasional contact
Mineral oil		...	...
Petroleum		..	...
Mineral spirit		.	...
Turpentine		.	...
Alkalis and Salts	Concentration	Permanent contact	Occasional contact
Oxygenated water	10%	..	...
	25%	.	...
Ammonia	25%	.	...
Calcium chloride	Saturated Sol.	...	...
Sodium chloride	Saturated Sol.	...	...
Sodium hypochlorite	1,50%	.	...
(Active chlorine)	13%	.	.
Caustic soda	50%	...	...
Aluminium sulphate	Saturated Sol.	...	...
Potassium hydroxide	50%	...	...
Potassium permanganate	5%	..	...
	10%	.	..
Solvents		Permanent contact	Occasional contact
acetone		.	.
Ethyl alcohol		.	..
Benzol		.	..
Chloroform		.	.
Methylene chloride		.	.
Ethylene glycol		...	...
Perchloroethylene		.	..
Carbon tetrachloride		.	..
Tetrahydrofuran		.	.
Toluol		.	..
Trichloroethylene		.	.
Xylene		.	..

Legend

... Excellent

.. Good

. poor

Values taken at: - ambient +23 °C / 50% R.H. - chemical aggressive agent +23 °C

Resistance to stains (iso 10545-14)		
Staining agents	Time exposed to staining agent: 24 hours	Time exposed to staining agent: 30 min.
Red wine	5	5
Mineral oil	5	5
Tomato ketchup	2	5
Mascara	3	5
Coffee	2	5
Hair dye	1	2

- Legend
- 5 can be cleaned under a running hot tap while gently rubbing with a sponge
 - 4 can be cleaned with a mild detergent while gently rubbing with a sponge
 - 3 can be cleaned with a basic detergent while vigorously rubbing with a sponge
 - 2 to clean, treat first with a solvent or aggressive acid or basic solution, then vigorously rub with a sponge
 - 1 cannot be cleaned by any of the aforementioned methods

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

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 shades shown are intended as an indication only.

Warning

- Product for professional use

→ abide by any standards and national regulations

→ use at temperatures between +5 °C and +30 °C

→ use packs which have been stored for 2 – 3 days before use at +20 °C

→ respect the mixing ratio of 2.82 : 0.18. For partial mixing, weigh the two parts precisely

→ workability times may vary considerably, depending on ambient conditions and the temperature of the tiles
- do not walk on floors that are still damp as dirt could still stick to them

→ do not lay on substrates subject to moisture rising or which are not completely dry

→ if necessary, ask for the safety data sheet

→ for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - globalservice@kerakoll.com

<div><div>Kerakoll Quality System</div><div>ISO 9001 CERTIFIED 1710/0327</div></div>	<div><div>Kerakoll Quality System</div><div>ISO 14001 CERTIFIED 18596-E</div></div>	<div><div>Kerakoll Quality System</div><div>ISO 45001 CERTIFIED 18596-I</div></div>
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The Rating classifications refer to the GreenBuilding Rating Manual 2013. This information was last updated in January 2023 (ref. GBR Data Report – 02.23); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see 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.