FugaTop 0-8

High-performance cementitious grout for filling joints from 0 to 8 mm in ceramic tiles, porcelain stoneware, mosaics and natural stone. Ideal for smooth, compact grouting. For interior and exterior use. Very low emission of volatile organic compounds. Complies with the requirements of class **CG2WA** according to **EN 13888** and **ISO 13007-3**.

MAIN AREAS OF USE

- Interior – exterior
- Floors and walls
- Heated floors
- Façades
- Tile-on-tile (overlay) installation
- Terraces and balconies
- Residential, public and commercial buildings
- Interior wet areas (bathrooms, shower enclosures)
- Tanks, swimming pools, fountains
- Spas and hammams

SUITABLE MATERIALS FOR GROUTING

- Ceramic tiles
- Single-fired tiles
- Double-fired tiles
- Terracotta – Clinker
- Marble – Granite – Stone materials
- Natural stone
- Porcelain stoneware
- Ceramic and glass mosaics
- Thin laminated porcelain slabs
- Large formats
- 320 x 160 cm slabs
- Resin- or cement-based agglomerates

CHARACTERISTICS

- Very low emission of volatile organic compounds (VOC). Complies with class **EC1^{PLUS}** under the **EMICODE** protocol and **class A+** (Émission dans l'air intérieur – French regulations)
- Plastic, smooth-flowing mix with thixotropic properties
- Suitable for grouting materials laid on heated screeds
- Full, smooth and compact joint
- Short waiting times and easy cleaning
- Maintains excellent workability during application without troublesome thickening
- Stable, uniform colours
- Mould resistant
- Water repellent
- High abrasion resistance

PACKAGING

3 kg bags (boxes of 6). Standard 648 kg pallet.

CONSUMPTION CALCULATION

FORMULA FOR CALCULATING CONSUMPTION: (A+B) / (AxB) x C x D x 1.6 = kg/m^2

A = tile length (in mm)
B = tile width (in mm)
C = tile thickness (in mm)
D = joint width (in mm)

APPLICATION CONDITIONS

Ambient temperature: +5 °C to +35 °C
Substrate temperature: +5 °C to +35 °C
Pot life: approx. 40 minutes at +23 °C

TILING DESIGN

The durability of ceramic tiling can only be guaranteed through good design. We therefore recommend consulting the national standards in force in each country, such as UNI 11493, which provides the guidance needed for the choice of materials, correct design, use and installation, so as to ensure that the required levels of quality, performance and durability are achieved.
By way of example, some general requirements are given below.

Substrates
Before laying, check that substrates are clean, free of loose parts, sufficiently dry and cured, flat and level, and have adequate mechanical strength for the intended use of the tiling.

Site conditions
Check that temperature, humidity, light and other conditions are suitable at the time the products are applied.

Materials
Check that all materials used in the tiling (ceramic tiles, levelling compounds, adhesives, sealants, waterproofing products, etc.) are suitable for the intended use and have been stored correctly.

Movement joints
Check that perimeter, expansion, intermediate and structural flexible joints have been correctly designed and provided. As a rule, intermediate joints should be provided for bays of 20/25 m² indoors and 9–15 m² outdoors. Outdoors, check that these joints are correctly waterproofed and sealed.

Joints
All ceramic tiling must have joints of appropriate width, based on the following parameters:
• Type, format and dimensional tolerances of the tiles
• Thermal expansion coefficients of the tiling materials
• Mechanical properties of the installation materials
• Location and layout of the joints
• Mechanical characteristics of the substrate
• Intended environment and expected service conditions
Butt-joint laying (zero joint width) is not permitted.

SUBSTRATE PREPARATION

Check that the adhesive or mortar used to bond the tiles is fully hardened and dry. Joints must be clean, free of dust and empty through the full thickness of the tiles.
Remove any plastic spacers. Any traces of adhesive or mortar squeezed up into the joints must be removed.
When grouting highly absorbent tiles in very hot weather, dampen the joints with a sponge soaked in water.
Make sure the ceramic tiles have no cleaning or surface absorption problems. Some types of tile (e.g. polished porcelain stoneware) and natural stones have surface micro-porosity and roughness that can cause staining of the surface and make cleaning very difficult. Preliminary application trials are always advisable.

PRODUCT MIXING

Mix **FugaTop 0-8** with 28–30% clean water (equal to 0.84–0.9 litres per 3 kg bag). Pour almost all the required mixing water into a clean container, then add the powder slowly while mixing the compound as it forms, using a low-speed drill fitted with a suitable paddle. Once all the powder has been added, pour in the remaining water and mix until the compound is homogeneous and creamy, free of lumps and of the desired consistency. Leave the mix to stand for 3 minutes, then remix briefly for a few seconds. The pot life of the mix is approx. 40 minutes at +23 °C, so only mix the quantity of material that can be applied within this time. Do not use more mixing water than indicated, to avoid shrinkage during curing and a reduction in the final mechanical properties.
Do not add further water once setting has begun.
Hand mixing is not recommended.

APPLICATION

Apply the mix into the joints with a rubber float until they are fully filled, working diagonally to the direction of the joints and removing excess material from the tile surface. When the product has lost its plasticity and turned matt (on average after 15–30 minutes, depending on joint width), clean and finish the grout surface with a well-wrung damp sponge, without leaving water deposits on the still-fresh product.
Clean before the product hardens in the joints.
Always work diagonally to the direction of the joints to avoid partially emptying them. If cleaning is carried out too early, i.e. while the grout is still plastic, the joints may be partially emptied and the final colour of the grout will not be uniform.
Any haze of dried product can easily be removed from the tile surface with a clean cloth after hardening.
If traces of product are still present on the tiled surface after cleaning, they can be removed with a suitable acid tile cleaner, no sooner than 7 days after grouting. Never use these types of cleaner on sensitive, non-acid-resistant floor and wall coverings (e.g. marble and limestone).
Tools used for installation can be cleaned with water before the grout hardens; after that, they can only be cleaned by mechanical removal.

NOTE

For tiled surfaces subject to heavy traffic, balconies, terraces, swimming pools, etc., the product can be mixed with the aqueous dispersion additive **BetonFIP Lattex**, replacing part or all of the mixing water, further enhancing the final performance of the grout.

PRODUCT INFORMATION

Appearance	Powder
Colour	See colour chart
Shelf life – 3 kg bag	24 months in original packaging in a dry place. Protect from frost.
Mixing ratio	Water = 28–30% (0.84–0.9 litres of water per 3 kg bag)
Mix consistency	Creamy thixotropic mortar
Mix maturing time	3 minutes
pH of mix	13
Specific weight of mix	1.94 kg/dm^3
Pot life	Approx. 40 minutes
Joint width	0 to 8 mm
Application	Rubber float
Permitted application temperatures	+5 °C to +35 °C
Waiting time before cleaning	Approx. 20 minutes
Foot traffic	24 hours
Ready for service	7 days
Service temperature	-30 °C to +80 °C
Tool cleaning	With water while fresh. Mechanically once hardened.

PERFORMANCE OF HARDENED PRODUCT

Characteristic	Performance	Test method
Classification	CG2 WA	EN 13888 – ISO 13007
Abrasion resistance	≤ 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
Alkali resistance	Excellent	
Solvent resistance	Excellent	
Acid resistance	Good resistance to acids with pH > 3	

COLOUR CHART

WARNINGS

• Apply the product at temperatures between +5 °C and +35 °C.
• Before application, make sure the adhesive used to lay the ceramics or mosaics is completely dry.
• Change the washing water frequently.
• Change the sponge when it becomes saturated with product.
• Protect from direct sunlight and strong draughts for the first 12 hours after application.
• Observe the mixing ratio.
• Do not apply 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 freshly grouted surface with sheets or other material, to avoid condensation forming, which would cause surface carbonation of the product and affect its colour uniformity. Wait at least 24–48 hours, depending on the temperature, before protecting the surface with breathable materials.
• Mixes prepared with different amounts of water may result in different final shades.
• Some types of tile (e.g. polished porcelain stoneware) and natural stones have surface micro-porosity and roughness that can cause staining of the surface and make cleaning very difficult.
• In these cases, preliminary application trials are advisable, and contrasting or very dark colours should always be avoided.
• Do not apply the product to joints wider than 8 mm.
• Do not use the product for applications not specified on this technical data sheet.
• If in doubt, consult the Licata S.p.A. Technical Service.

SAFETY

For information on the correct disposal, storage and handling of the product, please consult the relevant Safety Data Sheet.

FOR PROFESSIONAL USE
The information contained in this sheet, and in particular the technical advice on the methods of use and application of our products, is provided in good faith based on the current knowledge and experience of ***licata FIP Chemicals*** regarding its products, provided that they are correctly stored, handled and used in accordance with the recommendations given. It is the Customer's responsibility to determine whether ***licata FIP Chemicals*** products are suitable for the intended use and purposes, and to ensure that workplaces and disposal procedures comply with the laws and regulations in force. Substrates and actual site conditions can vary so widely that no guarantee can be given as to suitability for a particular purpose. ***licata FIP Chemicals*** reserves the right to change the technical characteristics, descriptions and illustrations of the product covered by this sheet at any time. The Customer must check that they have downloaded the latest version of its technical data sheet from the product page on our website **www.licataspa.it**. For further information, please contact the *Technical Service* of ***licata FIP Chemicals*** at serviziotecnicoinfrastrutture@licataspa.it or serviziotecnicoedilizia@licataspa.it.
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