

Sopro DF 10® Flexible Designer Tile Grout

A strong, flexible, rapid-set, cementitious tile grout, meeting CG2 WA requirements to EN 13888, for grouting all types of ceramic and natural stone coverings to produce a brilliantly coloured, lime film-free finish. Low-chromate to Regulation (EC) No 1907/2006, Annex XVII.

- For all types of ceramic, natural stone, glass mosaic and agglomerate tile coverings
- For 1 – 10 mm joint widths
- For walls and floors, indoors and outdoors
- High abrasion resistance: CG2 WA to EN 13888
- Uniformly brilliant colouring and lime-film-free thanks to OPZ® (Portland cement-free) technology
- Easy-care due to water and dirt repellency
- Enhanced resistance, even to acidic cleaners*
- Great protection against mould formation and microorganisms
- High crystalline water binding capacity
- Suitable for underfloor and undertile heating
- GEV EMICODE system: EC1^{Plus} 'very-low-emission-plus' **

Field Of Application

For grouting all types of ceramic, natural stone, cast stone, glass mosaic and agglomerate tile coverings, with 1-10 mm joint widths, to produce a brilliantly coloured finish on indoor and outdoor walls and floors. Also suitable for grouting thin tile coverings (≤4mm). Optional enhancement of visual appeal through addition of Sopro gold and silver glitter. Suitable for damp and wet spaces, living areas exposed to dirt/soiling, food areas and in conjunction with floor heating. Though Sopro DF 10® Flexible Designer Tile Grout is suitable for use in swimming pools, the following custom-formulated tile grouts are recommended for such applications: SoproDur® HF 8 / SoproDur® HF 30 high-strength tile grouts, Sopro FEP epoxy tile grout, Sopro FEP 604 three component epoxy tile grout or Sopro Topas® DFE designer epoxy tile grout.

Suitable Substrates

Concrete and lightweight concrete (min. 3 months old); cement screeds; calcium sulphate-based (anhydrite and alpha hemihydrate) screeds; mastic asphalt screeds (indoors); board subfloors; heated floor constructions (cement and calcium sulphate based screeds); strong existing ceramic, natural stone, terrazzo or cast stone coverings; paperless gypsum panels, gypsum plasterboard and gypsum fibreboard; flush-jointed masonry (no composite masonry); cement render; lime/cement render; gypsum plaster; rigid foam board. Waterproof coatings with Sopro FDF flexible sealing compound, Sopro DSF 523 one-component flexible sealing slurry, Sopro DSF 623 one-component flexible rapid-set sealing slurry or Sopro TDS 823 two-component turbo sealing slurry.

Properties

Strong, flexible, rapid-set, cementitious tile grout, meeting CG2 WA requirements to DIN EN 13888, for grouting all types of ceramic and natural stone coverings to produce a brilliantly coloured, lime-film-free finish. Enhanced protection against mould formation and microorganisms plus lime-film-free finish ensure brilliantly coloured joint pattern with lasting appeal, for both indoor and outdoor applications, and especially in moisture-exposed areas. Inherent water beading effect and Hydrodur® technology create water and dirt-repellent joints with antimicrobial capability. Sopro gold or silver glitter can be added to create distinctive, glistening joint finishes.

Application

Rake out joints to tile thickness before bedding mortar sets and clean thoroughly. Allow bedding mortar to set. Fill clean mixing container with 1.2 – 1.3 ltr clean mains water (1.05 – 1.15 ltr for intensive colours) for 5 kg dry powder (2.4 – 2.6 ltr for 10 kg respectively 0.24 – 0.26 ltr for 1 kg) DF 10®, add correct proportion of grout, and mix mechanically using mixing attachment to produce homogeneous, creamy mortar. After 3 – 5 minutes maturing time, remix thoroughly. **Observance of required maturing time is essential!**

For enhancement with Sopro glitter:

Fill clean mixing container with 1.3 – 1.4 ltr clean mains water (1.2 – 1.35 ltr for intensive colours) dry powder, add correct proportion of grout, and mix mechanically using mixing attachment to produce homogeneous, creamy mortar. While mixing, slowly add up to max. 2 bags of 100 g (10 kg DF 10®: max. 4 bags of 100 g; 1 kg DF 10®: max. 40g) of Sopro gold or silver glitter as required. After 3 – 5 minutes maturing time, remix thoroughly. Again, **observance of required maturing time is essential!**

Grout clean, raked-out joints, which may require slight pre-wetting depending on thickness and suction of tile body, with Sopro DF 10® using rubber squeegee or grout float, applying slight pressure to ensure that joints are completely filled. Do not spread dry mortar powder over joints.

Allow adequate drying time (depending on suction of covering) for freshly applied grout, then wash down tiled surface working diagonal to joints and taking care not to wash out surface of joint. This improves smoothness and compactness of joint surface. Where absorbent ceramics (earthenware) are used, it is helpful to adequately pre-wet tile surface, especially joints that are still open, prior to grouting. Rewetting of grouted surface with clean water - e.g. spraying with fine water mist (spray bottle) or damping with sponge is also recommended a few hours after tile grout has set - this improves the hardening process.

Note: pre-wetting of covering and, as a rule, trial grouting to check complete removability of cement and pigment residue are recommended for ceramic and natural stone coverings with rough, profiled, unglazed, unpolished or open-pored finish and for polished fully vitrified stoneware exhibiting surface micropores of varying size. Regularly replace wash water with fresh water. The freshly grouted joints should be protected against all elements that may impair setting, e.g. high temperatures, wind, rain or frost. The hardening process and colour brilliance of the tile grout largely depend on a steady supply of moisture during setting. Constructional solutions that encourage particularly high suction, e.g. traditional thick-bed methods for ceramic and natural stone coverings, may cause colour variations in the grout, though these may even out during the drying out process. The colour of the powder of DF 10® intensive colours is greyish. Only when mixing with water it develops the respective intensive colours. For maximum colour uniformity, particularly with the heavily pigmented and dark grout colours, exact compliance with the specifications regarding mixing water quantity, homogeneous mixing and maturing time is essential.

Ensure that a minimum amount of wash water is used for washing down, that the wash water is frequently changed and that no water film is left covering the joints. Dry rubbing of the washed and stiffened joints reduces risk of later efflorescence, while enhancing colour brilliance of joint surface. Unwashed, discolouring sand aggregate present in thick-bed mortars or discolouring substances from adjoining materials may cause staining. Full water repellency is achieved after approx. 7 days. Acidic media may, depending on their concentration, attack and destroy cementitious grouts.

*compared to standard Sopro cementitious tile grouts for domestic applications

** For all DF 10® colours except signal red, wine red and deep blue.

Application (continued)

For this reason, compliance with cleaner manufacturer's instructions on use is required when acidic cleaning agents are used. We recommend the use of acidic cleaning agents after 3 days at the earliest. Surface to be cleaned should generally be pre-wetted with water prior to use of acidic cleaning agents and shall be immediately rinsed with plenty of water after cleaning. Floor joints with Sopro DF 10 and Sopro Glitter have to be cleaned regularly. Dirt and settlements on the joints can possibly reduce the effect of the glitter. **Note:** as some types of natural stone may be prone to discolouration in contact with tile grouts, sample areas (mock-ups) should be prepared for discolouration sensitive natural stone coverings in order to assess suitability of grout.

Colours

1050 white 10, 1051 light grey 16, 1052 silver grey 17, 1053 grey 15, 1062 stone grey 22, 1054 concrete grey 14, 1055 sandgrey 18, 1069 manhattan 77, 1056 jasmin 28, 1063 light beige 29, 1057 beige 32, 1064 jura beige 33, 1058 parchment 27, 1065 bahama beige 34, 1066 brown 52, 1059 ballbrown 59, 1060 anthracite 66, 1061 black 90, Glitter: 1019 gold, 1020 silver.

Available in 5kg and 10kg buckets. Glitter 100g-10 no. per box.

Storage

Approx. 24** months, subject to storage on pallet in dry conditions in original unopened containers.

Disposal

13.1. Waste treatment methods. Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments. Disposal of hardened product (EC waste code) : 17 01 01. Disposal of not hardened product (EC waste code) : 17 01 01. The suggested European waste code is just based on the composition of the product. According to the specific process or application field a different waste code may be necessary.

Safety

Labelling

Exempt from labelling requirements under German Hazardous Substances Ordinance (GefStoffV). Contains cement. Exhibits strong alkaline reaction upon contact with moisture/water; protection required for skin and eyes. Rinse with water in case of contact. In case of contact with eyes, also seek medical advice. Once set, the material poses no physiological or ecological hazards. See Sopro MSDS for further information.

Safety recommendations (S-phrases)

S 2 Keep out of the reach of children

German Water Hazard Class (WGK): WGK 1: slightly hazardous to water (self-assessment in accordance with VwVwS – German Administrative Regulations on the Classification of Substances Hazardous to Waters into Water Hazard Classes – of 17.05.1999)

GISCODE (German hazardous substances classification): ZP 1: Low-chromate to Regulation (EC) No 1907/2006, Annex XVII

Technical Information

Colour	Various (see above)
Mixing Ratio (water only)	Approx. 0.24 - 0.26 ltr water : 1 kg Sopro DF 10
Mixing	Use a whisk in a slow speed electric drill and mix to a smooth consistency. Use immediately.
Consistency of mix	Smooth paste
Joint Width	1-10 mm
Coverage	Approx. 1.9 kg/m ² for 11.5 × 24 cm tiles and approx. 10 mm joint width; 0.7 – 1.0 kg/m ² for 30 × 30 cm or 40 × 40 cm tiles and approx. 10 mm joint width
Maturing Time	3-5 minutes at 20°C
Pot Life	30-40 minutes at 20°C - do not re-mix stiffened mortar
Walkable	After approx. 2 hours
Loading	After approx. 12 hours
Specified Times	Apply for normal temp. of +23 °C and 50 % relative humidity; higher temps. shorten & lower temps. lengthen times
Application Temperature	Between +5 °C and +25 °C (substrate, air, material)
Minimum tile thickness	4 mm
Tools	Mixing attachment, stainless-steel trowel, rubber squeegee, grout float, sponge float, roller set for cleaning; clean tools with water while material is still fresh


