

SCHÖNOX® CF DESIGN

Product data sheet

Epoxy resin colour grouting compound

especially for bonding and grouting visually appealing, decorative tiles and mosaics, as well as coverings for glass mosaic. Further more for the waterproof, frostproof and chemically resistant grouting of ceramic tiles in the food, confectionery and chemical industries, laboratories and swimming pools. Joint width 1 to 10 mm. Fulfills RG-requirements according to DIN EN 13888 and R2-requirements according to DIN EN 12004. For internal and external application.

Product characteristics

- excellent color by color sands and ceramic pigments
- fulfills RG requirements according to EN 13888
- fulfills the R2 requirements according to EN 12004
- solvent-free according to TRGS 610
- no water absorption according to DIN 12808-5
- for visually demanding grouting
- no discoloring of the grouts of ceramic tiles and mosaic
- especially against modern, acid detergent resistant
- very smooth application
- easy to use, even with profile-faced tiles
- highly fillable
- water and dirt repellent
- frost resistant
- resistant to chemical loadings
- very high strength
- easy to keep clean
- high adhesion to flanks
- hardening without cracks
- can be emulsified in water
- suitable for application on subfloor heating systems
- fulfills the requirements of DVGW leaflet W 270 "Reproduction of microorganisms on substances in drinking water areas"

Applications

SCHÖNOX CF DESIGN is suitable for grouting of:

- fully vitrified tiles
- Glassmosaic
- glass tiles
- stoneware tiles
- earthenware tiles

SCHÖNOX CF DESIGN is suitable for decorative and resistant bonding and grouting:

- of glass mosaic wall and floor surfaces
- in high-quality, heavy-duty wet areas (bath-rooms)
- of wall and floor coverings in steam baths and spa areas
- in swimming pools with normal, thermal or sea water

SCHÖNOX CF DESIGN is suitable for chemical resistant bonding and grouting

- in slaughterhouses, dairies and breweries
- for catering kitchens, car washes and cold storage houses
- in the food- and beverage industry
- in chemical companies, laboratories, warehouses and factory buildings
- in the paper-, leather- and textile industry
- in shipbuilding
- for walls and floors for interior and exterior use

For porous materials and sensitive surfaces of coverings a test grouting should be carried out.

Unsuitable for ceramic coverings in drinking water reservoirs.

Requirements of substrate

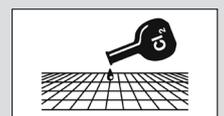
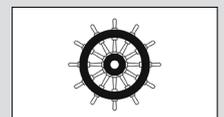
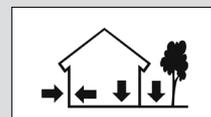
- Adequate strength, evenness, dimensional stability and dryness.
- Free of residues which reduce adhesion, e.g. dust, dirt, oil, grease, wax, cleaning agents and loose particles.
- Tile adhesive and compo should be hardened and sufficiently dry before grouting.

As used as tile adhesive on cementitious substrates:

- Subfloors must be smooth, sound, clean, dry and free of any contaminants which may hinder adhesion.
- Free of residues which reduce adhesion, e.g. dust, dirt, oil, fat and loose particles.
- Surface treatments or any "friable" areas of the subfloor must be me-

Technical data

- Basis: 2-component epoxy resin
- Pot life: approx. 50 minutes at +20 °C
- Ready for foot traffic: after approx. 16 hours
- Chemical resistant: after approx. 7 days
- Application temperature: not below + 10 °C
- Temperature resistance: completely cured -25 °C to +80 °C
- Colour: available in various colors
- Joint width: from 1 to 10 mm
- Material consumption: 0,3 - 3,2 kg/m², depending on tile size and size of the grout
- Material consumption (tile adhesive): with 4 mm notched trowel approx. 2,20 kg/m² with 6 mm notched trowel approx. 3,00 kg/m² with 8 mm notched trowel approx. 3,60 kg/m²



chanically removed and the subfloor repaired with SCHÖNOX levelling compounds as required.

- Substrate should fulfill the requirements of DIN 18 202, tolerances in building constructions.
- The requirements of DIN 18 157 are applicable.
- With subsequent installation of ceramic coverings, cement screeds are required to be at least 28 days old. Cement heating screeds are required to display a residual moisture reading of ≤ 2.0 CM-%.
- concrete (at least 6 months old)
- The requirements of the relevant valid standards, guidelines and data sheets apply.

Recommended method of working

- Thoroughly mix the SCHÖNOX CF DESIGN resin component (A) with the SCHÖNOX CF DESIGN hardener component (B) until the material is homogeneous and free of streaks.
- Slowly mixing using a continuously adjustable mixer with max. 300 rpm is recommended.
- Repot the mixed material and mix shortly again.
- Mix only the entire contents of a bucket (not partial quantities) to a homogeneous compound.
- Mixing and processing of SCHÖNOX CF DESIGN should preferably take place at +15 °C (room, surface and subsurface temperature) may be cool in a water bath or heat packs.
- The grout mortar is deeply inserted into the grout using a special grouting board. SCHÖNOX CF DESIGN can also be inserted with a compressed air injector.
- Remove excess material with the special grouting board so that only a thin film is left on the tile.
- For emulsify and cleaning warm water is recommended. Warm water makes cleaning easier.
- Emulsify any residues of materials with a special epoxy-sponge. Wash the joints smooth and clean the floor covering with a sponge board and cleaning sponge (Hydro).

- Alternative emulsify any residues of materials using pads. Wash the joints smooth and clean the floor covering with a sponge board and cleaning sponge (Hydro).
- Excess water from the emulsifying with the epoxy sponge or pad.
- Wash out the sponge well and change it regularly if he is too saturated with resin.
- For the last cleaning the sponge as often as possible wash out in clear water to remove any residual staining remain on the surface, because it will be difficult to remove after hardening.
- Inspect the cleaned surface for residues immediately after drying.
- No water shall be left standing on freshly grouted joints.

Used as a tile adhesive:

- SCHÖNOX CF DESIGN is also recommended where glass/translucent/stoneware mosaics are being fixed on walls and floors. SCHÖNOX CF DESIGN is suitable for fixing ceramic tiles etc. on floors. For fixing ceramic tiles on walls SCHÖNOX KR (epoxy-based adhesive) is recommended.
- Do not mix more material than can be handled within 50 minutes.
- The mortar is to be applied and combed off using a suitable notched trowel. The material to be laid is inserted and pressed into the fresh bed of adhesive while it is still wet. Remove mortar residues.
- SCHÖNOX CF DESIGN is suitable for application with the floating-, the buttering- and floating-buttering method according to DIN 18 157.
- For laying large-sized tiles and labs, pay attention to the valid basic rules and standards.
- Old ceramic coverings should be thoroughly cleaned (black pad) and probably abraded.
- For the laying of tiles over tiles on walls, we recommend to apply a scratch coat

Additional laying recommendations:

- Do not use for natural stones sensitive to discolouration, because discolouration can not be excluded.
- To increase the sliding properties with heavy tiles SCHÖNOX STELLMITTEL can be added to SCHÖNOX CF DESIGN. The application is described in Instructions.

Packaging

- 5,0 kg combined packaging composed of:
 - 4,59 kg component A (resin)
 - 0,41 kg component B (hardener)
- 2,5 kg combined packaging composed of:
 - 2,29 kg component A (resin)
 - 0,21 kg component B (hardener)

Storage

- Store SCHÖNOX CF DESIGN in cool, dry, frost-free conditions.
- Storage life of 2 years (in closed packaging).
- SCHÖNOX CF DESIGN can be transported up to -20 °C for max. 7 days.

Disposal

- Empty packaging completely and dispose of in accordance with regulations
- For the disposal of product residues, waste water and containers with adherent product residues please follow the local governmental regulations.

GISCODE

- RE 1 - epoxy resin product solvent free, sensitising

EPD - Self-declaration

SCHÖNOX GmbH declares as a statutory member of Deutsche Bauchemie and Industrieverband Klebstoffe that the product fullfills the criteria for tile adhesives based on epoxy resins, filled or aqueous, filled with high content of fillers.

ENVIRONMENTAL PRODUCT DECLARATION

acc. to ISO 14025 and EN 15804

Owner of declaration

Deutsche Bauchemie e.V.
Industrieverband Klebstoffe e.V.

SCHÖNOX® CF DESIGN

Product data sheet

Verband der deutschen Lack- und Druckfarbenindustrie e.V.

Editor

Institut für Bauen und Umwelt e.V. (IBU)

Program owner

Institut für Bauen und Umwelt e.V. (IBU)

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18.11.2012

Valid until

17.11.2017

Risk phrases

- Information on the safe handling of chemical products, as well as the essential physical, safety-related, toxicological and ecological data can be found in the current safety data sheets. Observe all relevant regulations, e.g. the hazardous substances act. Further instructions can be found on the internet at www.schoenox.com
- For professional use only.
- To wear suitable personal protective equipment is necessary in any case. Please, find details on in the safety data sheet, chapter 8.
- Wear suitable gloves e.g. from nitrile. Recommendation of KCL, Germany: CAMATRIL 730 material thickness 0,40 mm); max. wearing time: 8 hours.

Instructions

- All values are approximate and are subject to local climatic fluctuations.
- Protect ceramic coverings during and after grouting against direct sunlight and draughts.
- High temperatures accelerate, low temperatures decelerate the working and curing process.
- SCHÖNOX CF DESIGN is no displacement for a bottom sealing according the norm.
- Clean tools in water immediately after use. Hardened material can only be removed mechanically. Although keep in mind occupational safety.
- If in swimming pools chlorine-free water disinfection methods res. disinfac-

tants or active oxygen methods are used, we recommend to use SCHÖNOX XR 40 oder SCHÖNOX UF PREMIUM.

- Glass tiles or glass mosaic with back coating without product information should be checked for resistance of the coating against epoxy resin.

SCHÖNOX STELLMITTEL

Basis: High density polyethylene fiber. Mixing ration: 0,4 to 0,8 wt.-% for 2,5 kg or rather 5,0 kg SCHÖNOX CF DESIGN.(2,5 kg= 0,4 wt.-% correspond to 10 gram or approx. 5 heaped tablespoons / 0,8 wt.-% correspond 20 gram or approx.10 heaped tablespoons) (5,0 kg= 0,4 wt.-% correspond 20 gram or approx. 10 heaped tablespoons / 0,8 wt.-% correspond 40 gram or approx. 20 heaped table-spoons). Range of application: SCHÖNOX STELLMITTEL is suitable for increasing the sliding properties of SCHÖNOX CF DESIGN when used as an adhesive mortar. Instruction to use: SCHÖNOX STELLMITTEL is the last component added to the homogeneously mixed reaction resin and mixed homogeneous with a slowly rotating drill at the maximum 300 rpm. Storing: Cool, dry and frost- free. Shelf life: 2 years unopened. Disposal: Empty packaging completely and dispose of in accordance with federal, state and local waste disposal regulations.

The applicable recommendations, guidelines, DIN regulations and safety data sheets are to be observed, together with the recognised architectural and engineering regulations. We guarantee that our products leave the factory in perfect condition. While our recommendations for use are based on tests and practical experience, they can only provide general guidance without any assurance as to product characteristics, since we have no influence over the conditions on site, the execution of the work or the method of processing. This product data sheet supercedes all previous editions.



The Sika management system is certified to ISO 9001 and 14001 by SQS

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