

Technical Product Information

Waterproofings

Sopro DSF RS 623

Flexible RS sealing slurry

DSF RS 623



Reactive, sag-resistant, one-component mineral sealing slurry for production of flexible, crack-bridging waterproof membranes. For waterproofing indoor spaces to DIN 18534, for waterproofing tanks and pools to DIN 18535, for waterproofing normal, recessed and access balconies to DIN 18531 Part 5, and for waterproofing elements in contact with soil to DIN 18533. For fixing and bonding Sopro AEB® waterproof sheet membranes on all standard substrates and for waterproof bonding at laps in Sopro sealing tape, sealing collars and other fittings.

- For walls and floors, indoors and outdoors
- Reactive drying between sealing tape and fittings
- Sag-resistant, extra-creamy workability
- Working life: approx. 40 minutes
- Quick-drying (2 - 3 hours per coat)
- Very low consumption, very low shrinkage
- Suitable for bonding Sopro AEB® waterproofing membranes
- Suitable for bonding Sopro sealing tapes and moulded partst
- Certified low-temperature flexibility down to -5 °C: Class CMO1P to DIN EN 14891
- Low-chromate to Regulation (EC) No 1907/2006, Annex XVII
- Ready-to-use, highly elastic, crack-bridging liquid polymer waterproof coating
- For healthy living: Recommended by Sentinel Haus Institut

Coverage: Approx. 1.3 kg/m²/mm dry coat thickness



Packaging		Packages	Pallet weight
Bag	20 kg	50	1000 kg
Bag	10 kg	70	700 kg
Bag	2 kg	500	1000 kg

Use	For installation of waterproof membranes indoors (e.g. in showers, washrooms, toilets) to DIN 18534 for water action classes W0-I "Low", W1-I "Moderate", W2-I "High" and W3-I "Very high". For installation of waterproof membranes in tanks and pools (e.g. swimming pools, underground water reservoirs) to DIN 18535 Part 3 for water action class W1-B. For waterproofing normal, recessed and access balconies to DIN 18531 Part 5. For waterproofing elements in contact with soil to DIN 18533 for water action classes W1-E and W4-E (crack class R1-E and space use classes RN1-E to RN2-E, crack class R2-E substrates as so-called "special", i.e. non-standardized, construction); based on water action classes W2.1-E "Moderate water pressure action" and W3-E "Water without hydrostatic pressure acting on buried suspended slabs". Also suitable as contact layer on existing bitumen and tar pitch waterproofings prior to application of Sopro bituminous thick coatings. Suitable for fixing, watertight bonding at laps and joints in Sopro AEB® waterproof sheet membranes and for waterproof bonding of Sopro sealing tape, sealing collars and other fittings.
Suitable substrates	Mineral substrates comprising concrete, lightweight concrete, aerated concrete, cement and lime/cement render, gypsum plasterboard and gypsum fibreboard, renders made from masonry cement, plane, flush-jointed masonry (no composite masonry); cement screeds, calcium sulphate (anhydrite and self-levelling anhydrite) screeds, board subfloors, cement-bound drylining board, metal substrates (with metal substrates, please contact Sopro's Technical Service team); existing ceramic coverings, existing bitumen and tar pitch coatings; Sopro waterproof sheet membranes, Sopro sealing tape and associated system components.
Substrate preparation	Substrate shall be strong, dimensionally stable and free from wide cracks and adhesion-impairing substances (e.g. dust, oil, wax, release agent, efflorescence, laitance, paint, lacquer and varnish residue, old flooring adhesive residue). Sharp arrises shall be chamfered and internal (wall/floor) angles rounded true to line with min. 4 cm radius. Coating shall only be applied to elements not subject to settlement-related deformation. Any existing cracks in screed shall be filled with Sopro GH 564 casting resin or Sopro SH 649 shaken resin. Provision shall be made for necessary incorporation of Sopro sealing collars for walls, Sopro sealing collars for floors, Sopro sealing tape and Sopro sealing tape for angles at wall and floor penetrations, perimeter and movement joints.
Priming	Sopro SG 602 primer-sealer: Absorbent substrates such as cement render, lime/cement render, gypsum plaster, homogeneous, flush-jointed masonry (no composite masonry), concrete, aerated concrete, paperless gypsum panels, gypsum plasterboard and gypsum fibreboard, cement screeds, calcium sulphate screeds, natural stone, cast stone and terrazzo. Only use on moisture-resistant timber substrates. Do not use on substrates exposed to risk of rising damp. Sopro GD 749 primer: Cement screeds, calcium sulphate (anhydrite and self-levelling anhydrite) screeds, board subfloors, paperless gypsum wall panels, gypsum plasterboard/joints and filler, gypsum fibreboard, gypsum plaster, high- or variable-suction (interior) aerated concrete, cement and lime/cement render, masonry cement, flush-jointed masonry. Sopro HPS 673 bonding primer: Smooth and closed-pore substrates, e.g. existing tile, terrazzo, natural and cast stone coverings, adhesive residue from PVC flooring or carpeting.
Application	Pour water into container, add Sopro DSF 623 and mix with stirrer to homogeneous, workable, lump-free consistency. Briefly restir after 3 – 5 minutes maturing time. Waterproof membrane: Brush or trowel apply membrane in at least two coats to slightly damp or primed substrate. Apply second coat after first coat has properly set. Sopro DSF 623 is also suitable for roller and spray application and may be applied using industry-standard bitumen spray equipment. Use of a Wagner PC 830 PlastCoat spraying unit is recommended. In case of critical substrates (e.g. masonry), scrim (e.g. Sopro PG-X 1188 armour scrim eXtra or Sopro AR 562 scrim) may be incorporated in first membrane coat to increase crack-bridging performance. Start by sealing angles and junctions between wall and floor surfaces with Sopro sealing tape and Sopro sealing tape for angles certified for system compatibility. Seal any penetrations with Sopro wall collars or Sopro floor collars certified for system

compatibility. To incorporate sealing tape and fittings, place these in coat of Sopro DSF 623 and press down such that mineral sealing slurry is squeezed out at sides. Any unevenness or creases can be pressed down and smoothed out with finishing trowel. In compliance with good practice, Sopro DSF 623 shall be applied in at least two coats. Fully overcoat any pre-installed sealing tape and fittings with Sopro DSF 623. Tilelaying can commence (e.g. with Sopro's No.1 Silver flexible tile adhesive) after second membrane coat has fully dried. Waterproofing in underwater areas: Three-coat application is recommended by Sopro for underwater applications (min. 2.5 mm dry coat thickness). Upon completion of waterproofing works, trial filling of swimming pool is required. With Sopro DSF 623 membranes, this may be performed after 6 days. Upon completion of trial filling, a 48-hour waiting time is required after pool is emptied. Dried waterproof membrane shall then be visually inspected and thoroughly cleaned to remove dust and adhesion-impairing deposits or incrustations. After this, tiling may be performed. Coat thickness required for specific application is indicated in "Coat thickness/coverage" table. Sopro DSF 623 is also overcoatable and suitable as plastering/rendering background. To overcoat larger areas (> 1 m²), first apply combed skim coat to fully dried waterproof membrane with a Sopro flexible tile adhesive (e.g. Sopro's No.1 Silver). When crests of coat have set, surface can be overcoated with renovation and levelling render (e.g. Sopro RAP 2 434) or renders of mortar groups P II or P III to DIN 18550 (depending on application and manufacturer's specifications). Smaller areas (< 1 m²) can also be overcoated without prior application of a skim coat. Bonding of sheets: To bond Sopro AEB[®] waterproof sheet membranes, apply uniform, full-cover coat of Sopro DSF 623 over full surface of substrate with lambswool roller, working crosswise, or, for example, with 4 mm notched trowel. Ensure that adhesive coat is applied over width 10 cm greater than sheet width. Then place accurately cut lengths of membrane in adhesive coat so as to ensure full bonding. Run over sheet with finishing trowel or painter's roller arm, pressing down to remove any entrapped air below sheet. When smoothing down sheet, recommended procedure is to work outwards from centre to edges. Overcoat Sopro AEB[®] sheet membrane terminations with Sopro DSF 623. All suitable Sopro products for standards-compliant application are listed under "Test certificates". Please observe technical product information for relevant system products!

Water requirement	Per package	10 kg	20 kg	2 kg
	trowellable	2.5 l - 2.8 l	5 l - 5.6 l	0.5 l - 0.56 l
	sprayable	3 l - 3.2 l	6 l - 6.4 l	0.6 l - 0.64 l
	brushable	2.8 l - 3 l	5.6 l - 6 l	0.56 l - 0.6 l
Application temperature	Application temperature between +5 °C and +25 °C			
Coat thickness	In compliance with good practice, mineral sealing slurry shall be applied in at least two coats. Three-coat application is recommended by Sopro for underwater applications (min. 2.5 mm dry coat thickness). Stated consumption rates are minimum values. Separate, good-practice evening out of substrate, e.g. through application of a skim coat, is a prerequisite. Under DIN standards, minimum dry coat thickness d_{min} must be ensured by adding an (imputed) thickness supplement equal to at least 25 % of d_{min} . Additional consumption for a 25 % thickness supplement is given as consumption for required minimum dry coat thickness d_{min} x 0.25. Checks on coat thicknesses and drying: Under DIN 18195 Supplement 2, compliance with coat thickness requirements shall be ensured during application by checking applied quantity per m ² and wet coat thickness.			

Coverage chart

Coat thicknesses after 2-coat application in accordance with good practice:

Water action classes	Min. dry coat thickness	Min. wet coat thickness	Consumption rate per mm dry coat thickness
W0-I to W3-I	2.0 mm	2.6 mm	1.3 kg/m ²
W1-B	2.0 mm	2.6 mm	1.3 kg/m ²
DIN 18531 Part 5	2.0 mm	2.6 mm	1.3 kg/m ²
W1-E, W2.1-E, W3-E, W4-E	2.0 mm	2.6 mm	1.3 kg/m ²
Bonding of waterproof membranes (full-surface)	-	-	0.5 - 0.9 kg/m ²
Bonding at laps (6 cm)	-	-	35 - 55 g/m ²
Bonding at sealing tape joints (14 cm)	-	-	80 - 120 g/m ²

Laying of ceramic coverings	After approx. 4 hours
Maturing time	3-5 minutes
Resistant to water pressure	Loadable after approx. 3 days
Shelf life	Shelf life approx. 6 months, subject to storage on pallet in dry conditions in original unopened containers.
Specified times	Apply for normal temperature range of +23°C and 50 % relative humidity; higher temperatures shorten and lower temperatures lengthen these times.
Tool cleaning	Wash tools with water immediately after use
Tools	Finishing trowel, notched spatula, thick/block brush, lambswool roller, electrical screw pump
Walkable	After approx. 4 hours
Working life	Approx. 40 minutes; stiffened mortar shall not be retempered by addition of water or fresh mortar to restore workability.
drying time	2 - 3 hours per coat
Test certificates	PG-AIV-F (Criteria for Award of National Test Certificates for Liquid-Applied Waterproof Membranes Used in Conjunction with Tile Coverings): National test certificate (abP) for composite waterproofing systems with membrane and tile finish, for structural waterproofing in conjunction with: Sealing tape: AEB 148, AEB 1176, DB 438, DBF 638; Sealing tape for angles: AEB 642, AEB 643, DE 014, DE 015; Sealing collars: AEB 129, AEB 130, AEB 112, AEB 133, AEB 131, AEB 132, AEB 645, DWF 089, DMB 091; Bonding at joints: DSF RS; Tile adhesives: Sopro's No.1 (order no. 400), Sopro's No.1 Silver (order no. 403), Sopro's No.1 rapid-set (order no. 404), FKM XL 444, FKM 600, MEG 665, MEG 666, MEG 667 and other Sopro components PG-AIV-B (Criteria for Award of National Test Certificates for Waterproof Sheet Membranes Used in Conjunction with Tile Coverings): National test certificate (abP) for composite waterproofing systems with membrane and tile finish, for structural waterproofing in conjunction with AEB 640, AEB plus 639 and other Sopro components. PG-MDS (Criteria for Award of National Test Certificates for Mineral Sealing Slurries for Structural Waterproofing): National test certificate (abP) for use as mineral sealing slurry, for structural waterproofing in conjunction with: Sealing tape: AEB 148, AEB 1176, DB 438, DBF 638; Sealing tape for angles: AEB 642, AEB 643, DE 014, DE 015; Sealing collars: AEB 129, AEB 130, AEB 112, AEB 133, AEB 131, AEB 132, AEB 645, DWF 089, DMB 091 DIN EN 14891: In conjunction with suitable Sopro tile adhesives and Sopro GD 749 primer – Class CMO1P (crack-bridging ability at low

temperatures (-5 °C) and resistant to contact with chlorinated water) Determination of radon barrier performance: Radon protection to minimize radon migration from ground into building.

Licence

EMICODE system of GEV (German Association for the Control of Emissions in Products for Flooring Installation, Adhesives and Building Materials): EC1^{PLUS} ("very-low-emission-plus") rating

Safety precautions

GHS05

Signal word: Danger

Danger Contains Portland cement, Cr (VI) < 2 ppm

H318 Causes serious eye damage. EUH208 Contains 2-methyl-2H-isothiazol-3-one and mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).

P102 Keep out of reach of children. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor

GISCODE ZP1

Low-chromate to Regulation (EC) No 1907/2006, Annex XVII

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)

For trade applicators only!

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Please observe the current version of the product information, the currently valid declaration of performance under the EU Construction Products Regulation, and the latest version of the relevant safety data sheet to EC Regulation No 1907/2006, also available from the Internet at www.sopro.com! This document serves as a product description and sets out general details, based on empirical and test data, that take no account of specific cases of application. No liability may be construed and no claims shall be accepted in respect of these details. Should you require assistance, please contact our Technical Counselling Service.