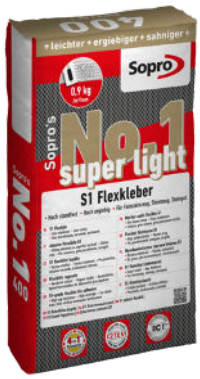
June 2026

Sopro's No.1 super light

S1 flexible adhesive

No.1 400



Highly deformable, cementitious, highly polymer-modified, S1-grade flexible tile adhesive, meeting C2TE S1 requirements to DIN EN 12004, for wall and floor installation of ceramic tiles, discoloration-resistant natural stone units and terracotta; also for underwater applications, e.g. in swimming pools and process water containers. Suitable for use in conjunction with wall and floor heating, waterproof membranes and for stoneware, fully vitrified stoneware and earthenware. Very high coverage and excellent workability. Also for tile-on-tile applications. With 4-in-1 formulation for thin-, floating- and medium-bed application, and for filling smaller areas with max. 20 mm coat thickness.

- For walls and floors, indoors and outdoors
- C2: tensile adhesion strength ≥ 1.0 N/mm²
- T: thixotropic – high sag resistance due to fibre reinforcement
- E: extended open time ≥ 30 minutes
- S1: Deformability ≥ 2.5 mm
- 4-in-1 formulation: Thin-bed, floating-bed and medium-bed laying; filler coats of up to 20 mm thickness
- Excellent workability thanks to lightweight aggregate
- Suitable for large-format units
- Approved as system component for shipbuilding applications
- System component of Sopro eScann® system
- Low-chromate to Regulation (EC) No 1907/2006, Annex XVII

Coverage: Approx. 1.0 kg / m² / mm

Order nr.	Delivery form	Pcs./pal.	kg/pal.
7740083	Big bag 1000 kg	1	1.000 kg
7740079	Big bag 500 kg	1	500 kg
7740025	Bag 25 kg	40	1.000 kg
7740015	Bag with handle 15 kg	60	900 kg
7740005	Bag 5 kg	200	1.000 kg

Use

Suitable material: Tiles and slabs made of earthenware, stoneware and porcelain stoneware, mosaics, natural stone resistant to discolouration, artificial stone, clinker brick slips.

Areas of application: For residential areas, commercial and industrial areas, bathrooms, commercial kitchens, damp and wet rooms, swimming pools, balconies and terraces, facades. For levelling and smoothing small areas up to 20 mm thick (max. layer thickness 5 mm for drywall constructions and mastic asphalt screeds).

Temperature Resistance

bis +80 °C

Substrate Preparation

The substrates must be clean, firm, load-bearing, dimensionally stable and free from adhesion-reducing substances.

- Screed cracks: should be force-fitted with resin, e.g. with Sopro Schüttelharz.
- Unevenness: Should be levelled e.g. with Sopro RAM 3®, Sopro Reparatur-Spachtel, Sopro FS 15® plus, Sopro VarioFließSpachtel or Sopro S-Flow.
- Cement screeds: must be 28 days old and dry or use rapid screeds such as Sopro Rapidur® B1, Sopro Rapidur® B3 and Sopro Rapidur® B5. Floating cement screeds or cement screeds on a separating layer should have a residual moisture content ≤ 2.0 CM-%. Bonded cement screeds can be covered with tiles as soon as they can be walked on. When laying natural stone, discolouration due to moisture penetration must be taken into account.
- Calcium sulphate screeds: (anhydrite and anhydrite flowing screeds) must be sufficiently sanded, vacuumed and primed and have a moisture content ≤ 0.5 CM% when unheated and a moisture content ≤ 0.3 CM% when heated. Heated cement and calcium sulphate screeds must be heated before laying.
- Gypsum plasters: must be dry, single-layered and must not be felted or smoothed.

The relevant standards, guidelines and recommendations as well as the generally recognised rules of technology apply.

Primer

- For highly and differently absorbent substrates: Sopro Primer 749 and Sopro Barrier Primer 602
- For non-absorbent substrates: Sopro Adhesion Primer S 673
- For calcium sulphate screeds: Sopro MultiGrund 637 (for all formats), Sopro Grundierung 749 (formats up to 0.2 m^2), Sopro SperrGrund 602 (formats up to 1.0 m^2)
- For consolidating sanding, mineral substrates and as an adhesion promoter on smooth substrates: Sopro Epoxy Primer 1522

Further information can be found in the respective technical data sheets.

Application

Pour the appropriate amount of water into a clean mixing vessel and mix Sopro's No.1 intensively and lump-free until the desired mortar consistency suitable for processing is achieved. After a maturing time of 3 - 5 minutes, mix again thoroughly.

Apply a contact layer with the smoothing trowel, then apply the comb bed with a suitable notched trowel (tool angle 45° - 60°). Only apply as much mortar as can be covered with tiles within the open time (30 min.). Insert tiles under pressure, push in and adjust. Scrape out the joint mesh before hardening and wash off the covering.

Unevenness in the substrate or necessary slopes can be levelled in small areas up to a layer thickness of 20 mm (max. layer thickness 5 mm for drywall constructions).

The addition of Sopro megaFlex Dispersion 1567 increases the deformability and adhesion between substrate, tile adhesive and tiling material. In addition, Sopro's No.1 can achieve the S2 level according to DIN EN 12004 with sufficient addition of Sopro megaFlex Dispersion 1567. Please note the required quantities in the technical data sheet for Sopro megaFlex Dispersion 1567.

Consumption Rate

Approx. 0.9 kg/m² per mm layer thickness.

Water demand

Per package	5 kg	15 kg	25 kg	500 kg	1000 kg
Thin bed	1,8 l - 2 l	5,4 l - 6 l	9 l - 10 l	180 l - 200 l	360 l - 400 l
Medium bed	1,8 l - 1,9 l	5,4 l - 5,7 l	9 l - 9,5 l	180 l - 190 l	360 l - 380 l
Floating bed	2,2 l - 2,3 l	6,6 l - 6,9 l	11 l - 11,5 l	220 l - 230 l	440 l - 460 l
Surface filler	1,8 l - 1,9 l	5,4 l - 5,7 l	9 l - 9,5 l	180 l - 190 l	360 l - 380 l

Modification

Sopro's No. 1 400 can be tempered with Sopro megaFlex Dispersion 1567. From 25% dispersion addition, S2 level according to DIN EN 12004 can be achieved.

Walkable / Groutable

After approx. 12 hours or after the mortar has hardened;
Provide load distribution measures on the floor.

Loadable

After approx. 3 days; commercial properties after approx. 14 days, areas with high wet load after approx. 7 days, underwater areas after approx. 21 days, wall and underfloor heating after approx. 14 days

BigBag

The following instructions refer in particular to rational processing with the aid of silos and connected mixing equipment. Store the Sopro BigBag in its original dry container, protected from moisture and without exposure to strong sunlight. Install compatible mixing equipment in accordance with the manufacturer's instructions.

Silo recommendation: Capacity 1,200 litres or larger, e.g. from the company M-tec. Mixing technology recommendation: Continuous mixer MAI® 2MIX-LYRA-PICCOLO (requires 16 amp power connection and water connection with GK coupling). If necessary, please consult the manufacturer or Sopro Application Technology. Further information can be found on our homepage under "Processing instructions BigBag".

Suitable Substrates

At least 3-month-old concrete, lightweight concrete, cement screeds, calcium sulphate screeds (anhydrite and anhydrite flowing screeds), mastic asphalt screeds (interior), dry screeds, heated floor constructions (cement and calcium sulphate screeds), old and solid ceramic, natural stone, terrazzo or artificial stone coverings, plasterboards, plasterboard and gypsum fibre boards, fully-jointed masonry (no mixed masonry), plasters produced from natural stone, terrazzo or artificial stone, plasterboards, plasterboard and gypsum fibre boards, fully-jointed masonry (no mixed masonry), natural stone, terrazzo or artificial stone coverings, plasterboards, plasterboard and gypsum fibreboards, fully jointed masonry (no mixed masonry), plasters made from plaster and masonry binder, cement plaster, lime cement plaster, gypsum plaster and rigid foam boards. In principle, all substrates must be load-bearing and dimensionally stable. The specifications of DIN 18157 generally apply.

Waterproofing made of Sopro FlächenDicht flexibel 525/527, Sopro TurboDichtSchlämme 823, Sopro DichtSchlämme Flex 523, Sopro DichtSchlämme Flex 423, Sopro DichtSchlämme Flex RS 623, DSF SL 1525, Sopro PU-FlächenDicht Wand/Boden 1570/1571, Sopro ZR Turbo MAXX 618, Classic DSC 979, Sopro Boards, EM-X 1189, Sopro AEB® 640 and Sopro AEB® plus 639.

GEV Emicode

EC1PLUS very low emissionPLUS

Maturation time

3 - 5 minutes

Open Time

Approx. 30 minutes

Underwater And Permanently Underwater Area

suitable

Application Temperature

Can be used from +5 °C to max. +30 °C; in the cold season, we recommend the use of a quick-setting Sopro thin-bed mortar for outdoor areas

Working Life

3 - 4 hours; hardened mortar must not be made workable again with water or fresh mortar

Coverage Chart

Serration (mm)	4	6	8	10	12	20
Consumption kg/m²	0,9	1,4	1,8	2,3	2,8	4,6

All specified consumption values depend on the angle of inclination of the notched trowel and the type and evenness of the substrate.
Toothing 20 mm corresponds to TKB toothing M1 (half-round toothing).

Recommendation for grouting

For grouting ceramic tiles and slabs with absorbent bodies (stoneware), we recommend Sopro Saphir® 5 PerlFuge for joint widths:

- from 1 to 5 mm Sopro Saphir® 5 PerlFuge
- from 1 to 10 mm Sopro DF 10® DesignFuge Flex

For grouting tiles and slabs with low-absorbent or non-absorbent bodies (stoneware and porcelain stoneware), we recommend the following for joint widths

- from 1 to 10 mm Sopro DF 10® DesignFuge Flex
- from 2 to 20 mm Sopro FlexFuge FL plus

For jointing concrete and natural stone coverings, we recommend the following for joint widths

- from 1 to 10 mm Sopro DF 10® DesignFuge Flex
- from 2 to 20 mm Sopro FlexFuge FL plus

For jointing in areas subject to high mechanical stress (workshops, commercial areas) we recommend for joint widths:

- From 1 to 10 mm Sopro TitecFuge® plus TF+
- From 3 to 30 mm Sopro TitecFuge® wide TFb

For jointing with chemical-resistant jointing mortar, we recommend the following for joint widths

- from 1 to 10 mm Sopro DFX DesignFugenEpoxi
- from 1.5 to 12 mm Sopro FugenEpoxi FEP

Wall and floor heating

suitable

Tools

Stirring paddle, notched trowel with suitable teeth up to a tooth size of 12 mm

Tool Cleaning

Clean tools with water immediately after use.

Specified Times

Refer to the normal temperature range +23 °C and 50 % relative humidity; higher temperatures shorten and lower temperatures lengthen these times.

Test Certificates

- DIN EN 12004: C2 TE

- DIN EN 13501-1: Fire behavior class A1/A1fl
- DIN EN 14891: No. 1 400 in conjunction with DSF 423, DSF 523, DSF RS 623, TDS 823 and GD 749 meets the requirements, including those for adhesive strength after storage in chlorinated water
- DIN EN 14891: No. 1 400 in conjunction with PU-FD 1570/1571 and EPG 1522 meets the requirements, including those for adhesive strength after storage in chlorinated water
- PG-AIV-F: System component of the general building authority test certificate (abP) as a system test in combination with DSF 523, DSF RS 623, DSF 423, ZR 618, TDS 823, FDF 525/527, PU-FD 1570/1571, DSF SL 1525 and other Sopro components
- PG-AIV-B: System component of the general building authority test certificate (abP) as a system test in combination with AEB 640, AEB plus 639, EM-X 1189 and other Sopro components
- PG-AIV-P: System component of the general building inspectorate test certificate (abP) as a system test in combination with Sopro Board and other Sopro components
- ETAG: European Technical Approval ETZ: System component of ETA No. 13/0155 in accordance with ETAG 022 T.1 and ETA No. 13/0154 in accordance with ETAG 022 T.2
- BG traffic: Approval for shipbuilding as a system component with EPG 1522, QS 507, PU-FD 1570, KM 027, QS 511 and TF+ (decorative veneers and floor)

BG Verkehr

Approval for shipbuilding in Sopro System 2.10 (decorative veneers), MED approval no. 118517-00, USCG approval no. 164.117/EC0736/118512-00. Wet application quantity of Sopro's No. 1 400: max. 3,479 g/m². Other components in Sopro System 2.10: EPG 1522, QS 507, PU-FD 1570, KM 027, QS 511, porcelain stoneware tile (approx. 7 mm) and TF+. Joints ≤ 4 mm. Total thickness approx. 14 mm.

Approval for shipbuilding in Sopro System 3.15 (floor coverings), MED approval no. 124175-00, USCG approval no. 164.117/EC0736/124175-00. Wet application quantity of Sopro's No. 1 400: max. 4,027 g/m². Other components in Sopro System 3.15: EPG 1522, QS 507, PU-FD 1570, KM 027, QS 511, fine stoneware tile (approx. 7 mm) and TF+. Joints ≤ 4 mm. Total thickness approx. 14 mm.

Shelf Life

Approx. 12 months (dry, unopened original container)

Giscode A

ZP1

Safety instructions

Labelling according to Regulation (EC) No 1272/2008 (CLP).
GHS05
GHS07
Signal word Danger
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
Keep out of reach of children.
Read label before use.

Contains: Contains Calcium diformate. Contains Portlandzement, Cr(VI) <2ppm.
German Water Hazard Class: German Water Hazard Class WGK 1 (slightly hazardous to water)
GISCODE: ZP1
Low chromate according to Regulation (EC) No 1907/2006, Annex XVII

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.

Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Recover if possible. A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.
Methods of disposal: Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Do not dispose of waste into sewers.
Hazardous waste: Yes
Disposal considerations: Do not allow to enter drains or watercourses.
Dispose of product according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.
Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.
Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Empty containers or liners may retain some product residues.
Do not re-use empty containers.

The information, and, in particular, the recommendations relating to the application and end-use of SMET distributed products, are given in good faith based on SMET's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the manufacturer's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. The manufacturer reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.