

Fire protection silicone with Swiss fire classification number 5.3 (VKF No. 24696) and various tests in accordance with EN 1366 4 and BS 476 Part 20

Application areas

Wikosil-BS is a soft elastic fire protection silicone for fire-retardant constructions

- in the interior and exterior of buildings and ships
- for glazing in wooden and metal windows, metal façades, fire doors, joints in fire protection walls and ceilings
- for pipe and cable penetrations
- for sealing and caulking joints as well as for transitions on glass, concrete, artificial stones, ceramics, treated wood, zinc, aluminium, non-ferrous metal etc.
- for connection joints on windows, doors, tiles, for heating and ventilation pipes, cold storage rooms etc.
- ideal for fire protection applications, building construction, glass construction, window manufacture, metal construction, joint specialists, interior finishing, bottomer feeders, apparatus construction, industry etc.

Product benefits

- CH-fire index 5.3
- elastic
- neutral cross-linking (state-of-the-art NO-MEKO technology)
- good adhesion to most substrates used in the construction industry like glass, wood, wood-based materials, masonry (bricking), concrete, eternit and metal
- good UV, weather and ageing resistance
- almost odourless
- solvent-free (VOC-free)
- for indoor and outdoor use
- no risk of corrosion
- free of shrinkage and bubbles
- hardly any surface soiling

Base

Neutral curing RTV-1 silicone sealing compound; after extrusion, the product vulcanises under the influence of humidity, forming a silicone rubber that remains elastic, therefore allow silicone to evaporate unhindered.

Restrictions

Not suitable for oil and bitumen-containing substrates, waxy substrates, PE, PP, Teflon®, mirror backsides, pools, aquarium construction, natural stone (edge zone discolouration). Our range of products offers you a choice.

Preventive fire protection

The independent fire protection tests of Wikosil-BS were carried out in accordance with EN 1366-4 and BS 476 Part 20 and certify in each case:

- room sealing tightness of at least 120 min (cotton swab test, flame penetration)
- temperature rise on the opposite side of less than 180 °C in at least 120 min (thermal insulation)

The values achieved were significantly better in some cases (up to 4 h)

Joint arrangements during the tests:

Construction type lightweight construction wall (plaster)

Joint width	Joint depth	Backfill material (mineral wool)	Joint type
40 mm	10 mm	double-sided, 20 mm	double-sided
10 mm	10 mm	double-sided, 20 mm	double-sided

Construction type floor and ceiling construction (concrete)

Joint width	Joint depth	Backfill material (mineral wool)	Joint type
40 mm	30 mm	one-sided, 50 mm	one-sided
10 mm	15 mm	one-sided, 50 mm	one-sided
40 mm	20 mm	double-sided, 50 mm	double-sided
10 mm	10 mm	double-sided, 50 mm	double-sided

Processing

The bonding surfaces must be sound, dry and free of dust and grease.
Pre-coat absorbent and porous substrates with Wi-Primer V-02; this applies in particular to gypsum fibreboards!
Use Wi-Primer V-01 as a solvent-free alternative.
Clean non-absorbent surfaces with Wisatyp TL 16.
Check treated and non-absorbent surfaces with an adhesion test.

Follow the rules for joint dimensioning.

Minimum joint width: 4 mm, minimum joint depth: 4 mm

Maximum joint width: 40 mm, maximum joint depth: 15 mm (30 mm) *

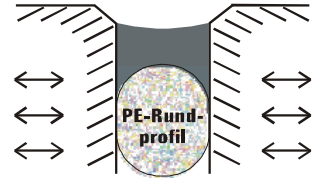
	Joint width							
Joint depth	4 mm	5 mm	6-7 mm	8-10 mm	12 mm	15 mm	20 mm	25 mm
4 mm								
5 mm								
6 mm								
7 mm								
8 mm								
10 mm								
12 mm								

	Optimum dimensions for moving joints
	Limit dimension for slightly moving joints
	Dimension for non-stressed joints

* Values for fire protection applications may differ

We recommend masking the edges of the joint with masking tape to ensure a clean and straight joint.

Before sealing, the joints must be pre-filled by pressing in a durable, preferably convex backfill material so that there is an enlarged adhesive surface on the joint flanks.



For this purpose, depending on the application, we recommend from our product range:

- Wisabax BSF 1 fire protection joint cord
- Wikofix FBD 550 fiberglass fire protection seal
- Wikofix ceramic tape
- Wisabax BS round profiles
- Wisabax PE round profiles
- Wisabax PUR round profiles

The sealant must be sprayed in such a way that sufficient pressure is exerted on the joint flanks. In particular, make sure that no air bubbles are trapped in the joint sealing compound.

Smooth the pressed-in sealant with a suitable joint spatula before skin formation. For smoothing joints, our smoothing compound Wikofix GM 52 has proved its worth in practice.

We accept no liability for damage caused by the use of commercially available detergents.

The masking tape must be removed immediately after application.

Swiss Fire Protection Approval Number

24696 (Association of Cantonal Fire Insurance Companies)

Fire index

Switzerland: 5.3 (Test report from Swissi Process Safety GmbH, Basel)

Fire behaviour

hardly flammable, weak smoke formation, no dripping on the test piece

further tests

various tests acc. to EN 1366-4 and BS 476 part 20

Density

ca. 1.4 g/cm³

Consistency

pasty, firm

Skin formation

after 20 min under normal conditions (+20 °C, 60 % rel. humidity)

Volume shrinkage

<3 - 4 % by volume

Max. total deformation

ca. 25 % for standardised joints

Setting time

ca. 2 mm on the first day, then decreasing in depth

Recoatability

limited colour compatible (under certain conditions) in the border area acc. to DIN 52452-4

Shore A hardness


ca. 20 - 25

Temperature resistance

-40 °C up to +150 °C (after complete cross-linking)

Breaking elongation

>350 %

Repairing	can be repaired with the same material
Substrates	Glass, ceramics, enamel, wood, wood-based materials, treated wood, masonry (bricking), concrete, plastering, brick, artificial stones, eternit, metal, treated aluminium, copper, zinc. For further surfaces, you will need to carry out your own tests.
Cleaning agents	Wisatyp TL 16 for cleaning non-absorbent adhesive surfaces and fresh product residues. The cured product can normally only be removed mechanically. To wash your hands, please use water and soap.
Processing temperature	from +5 °C up to +40 °C
Frost resistance	up to -15 °C (during transport)
Certificates / Norms	<ul style="list-style-type: none">▪ EN 15651-1: F EXT-INT 25 LM (façade joints)▪ EN 15651-2: G 25 LM (glazing joints)
Further information	 You can find more information about this product (link to the product on our homepage, safety data sheet, certificates, special enquiries etc.) under the adjacent ISOPIN QR code.
Item no. + Colour	BS 8912 white BS 8913 grey cartridge of 310 ml BS 8913 black
Delivery form	carton box of 12 cartridges of 310 ml
Shelf life	In closed original packaging, protected from direct sunlight and stored in a dry place between +15 °C and +25 °C, the official shelf life is 18 months from date of production (the printed expiry date is decisive).

Safety and disposal: Familiarise yourself with the valid Safety Data Sheets (SDS) for the products used. All applicable safety regulations and disposal instructions must be observed.

Observe: All information is based on careful examinations in the labs and our previous practical experience. They are non-committal notes. Due to the many materials that are marketed and the different processing methods, which we cannot influence, we can, of course, not assume any warranty, including under patent-law, for the result of your work. We recommend performing sufficient own tests to find out if the product meets the respective requirements. In addition, we refer to our terms and conditions of sale, delivery and payment, available at www.wisabax.ch/agb.html. © Wisabax AG - This technical data sheet replaces all older versions.

Have you noticed an unclear formulation or an error? Thank you for your feedback. In case of doubt, the German version of the technical data sheet applies.