

# Technical datasheet

for silicone sealant SILIKON profi Alcoxy-F

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# 6. Oct. 2022

Creation date

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## **1.1 Product identification**

Trade name	: SILIKONprofi ALCOXY-F
Product name	: SILIKONprofi
Article number (GTIN/EAN)	: See product imprint
Product type	: One-component silicone sealant based on Alcoxy (RTV-1)

### **1.2 Product description**

#### S-Polybond SILIKON *profi* is a specially developed silicone for bonding and sealing.

The silicone sealant S-Polybond **SILIKON***profi* is a ready-to-use, neutrally cross-linking silicone sealant based on Alcoxy. Silicone sealant based on Alcoxy for bonding and sealing and is characterised by very good processability. The odourless, permanently elastic silicone is characterised by a very high resistance to ageing, weathering and UV radiation and bonds to almost all materials used in construction and industry.

#### Use of the substance or mixture

S-Polybond SILIKONprofi is a one-component silicone sealant and is applied with a commercially available application gun for silicone cartridges. for silicone cartridges. When used as a sealant, the silicone is usually smoothed out afterwards with a smoothing agent and/or joint remover to achieve an even appearance of the silicone joint.

# 2 - Fields of application

#### 2.1 Suitable materials

#### S-Polybond SILIKON profi specially developed for durable, elastic sealing and bonding.

Sealing	Perfectly suitable for sealing elastic joints indoors and outdoors.
Bonding	Ideal for bonding materials with different expansion coefficients.

Excellent adhesion to almost all materials used in construction and industry, even without primer.

#### Suitable surfaces

S-Polybond **SILIKON***profi* does not attack the surfaces and can be used on almost all common materials e.g. aluminium, glass, tiles, concrete, sand-lime brick, polyester, ABS, polystyrene, brass, steel, treated wood, PVC, etc. as an adhesive and sealant.

### 2.2 Suitable applications

#### S-Polybond SILIKON profi is versatile and perfectly suited for permanently elastic joint sealing.

As a permanently elastic sealant, the silicone sealant is excellently suited for expansion joints, wall connection joints or construction joints for effective sealing of buildings. The UV- & weather-resistant silicone based on Alcoxy is meco-free and equally suitable for interior and exterior applications. The silicone sealant is available in colours according to the RAL colour system for inconspicuous sealing with the highest demands on durability and elasticity. S-Polybond **SILIKON** *profi* is fungicide treated and effectively prevents mould growth.

## 3 - Product features

### 3.1 General performance characteristics

- Ready-to-use, one-component silicone sealant based on meco-free alcoxy technology.
- Contains no solvents or acids and does not attack surfaces.
- Fungicide-treated and therefore has excellent mould-inhibiting properties.
- Adheres very well, even without primer, to almost all materials used in construction and industry.
- Can also be used on alkaline surfaces such as concrete or brick (primer recommended).
- Permanently elastic sealant with a very high recovery of more than 90%.
- Excellent resistance to ageing, UV radiation and weathering.
- Very high, uniform pigmentation for rich colours according to RAL colour system.
- Odourless curing and very low emission values with the best rating A+ (VOC emission).
- Very good workability due to perfectly matched viscosity.



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# 3 - Product features

## 3.2 General product characteristics

Property	Parameter
Type of sealant	Polysiloxane
Colour	According to product specification
Viscosity	Pasty
Curing system	Cross-linking by air humidity
Skin formation	10 minutes
Curing speed	1 - 2mm after 24 hours
Odour	Neutral
Density	1.2 g/cm <sup>3</sup>

# 3.3 General processing properties

Property	Parameter
Working time	approx. 10 minutes
Working temperature	+5 °C to +30 °C
Optimum storage temperature	+5 °C to +25 °C

### 3.4 Physical properties after curing

Property	Parameter
Shore A Hardness	23 according to ISO 868
Elongation at break	300 % according to ISO 8339
Elastic recovery	>90 % according to ISO 7389
Maximum permissible deformation	25 % according to ISO 11600
Stress values (at 100% elongation)	0.36 N/mm <sup>2</sup> according to ISO 8339
Temperature resistance	-50 °C to +150 °C

# 4 - Processing

## 4.1 Safety and handling

#### Observe the instructions in the safety data sheet before using the product!

Contains N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine, N-(3-(trimethoxysilyl)propyl) ethylenediamine, 3-aminopropyltriethoxysilane, trimethoxyvinylsilan. May cause allergic reactions. Safety data sheet available on request. Emergency eye showers should be available in the immediate vicinity of possible exposure.

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving the workplace.

Caution. Spraying may produce hazardous respirable droplets. Do not inhale aerosol or mist.

Ensure good ventilation of the workplace. Under normal conditions of use and with adequate ventilation no special respiratory equipment is required under normal conditions of use.

Under normal conditions of use, special clothing/skin protection equipment is not required.

Avoid contact with eyes and skin. When leaving the workplace, wash hands and other exposed areas with soap and water.

Remove all contaminated clothing immediately. Wash contaminated clothing before reuse.

Keep packaging tightly closed. Store in a dry and well-ventilated place.

#### 4.2 Surface preparation

#### Surfaces must be cleaned before applying the joint sealant.

The surfaces should be cleaned of dust, grease, oil or other dirt before applying the joint sealant. Furthermore, the surfaces should be dry. This is the only way to ensure a permanently tight and and secure sealing or bonding of the surfaces can be guaranteed.

We recommend using a suitable cleaner to clean the surfaces.

e.g. S-Polybond PLASTIC clean in the practical 500ml spray bottle.



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# 4 - Processing

### 4.3 Application of the silicone sealant

#### S-Polybond SILIKON profi can be applied with any conventional application gun.

Apply the sealant evenly into the joint with an application gun. Make sure that enough silicone is enough silicone is applied to be able to remove excess material in the smoothing process without leaving gaps. This is the only way to ensure sufficient adhesion to the flanks. Do not fill the joint completely with silicone, as this creates a 3-flank adhesion, which has a negative effect on the elasticity of the joint and the permanent and can reduce the permanent flank adhesion.

For joints with a high joint depth, we recommend the use of round cords as filling material to reduce the joint depth to the required joint thickness. Excessive joint thickness can reduce the elasticity of the joint. Too small, on the other hand, can result in a cohesive fracture of the joint.

#### Recommendations for joint dimensions

#### Joint width Joint depth Approved difference

3 - 4 mm	3 - 4 mm	± 1 mm
6 mm	6 mm	±1mm
8 mm	8 mm	±1mm
10 mm	8 - 10 mm	± 2 mm
15 mm	10 mm	± 2 mm
20 mm	10 - 12 mm	± 2 mm
25 mm	15 mm	± 3 mm

Maximum joint width: 30 mm

#### 4.4 Processing instructions

#### Follow the instructions listed and observe the safety data sheet.

At the beginning, dispense a small amount of the sealant on a test piece of the surface to make sure that sufficient adhesion is ensured (applies especially to porous or absorbent surfaces).

Apply the joint sealant in such a way that adhesion to all sides of the surfaces is ensured and if necessary, use a special smoothing agent even before the sealant has started to form a skin. Dose the smoothing agent so that the entire joint is wetted with the smoothing agent and smooth the joint with your finger or with a smoothing or with a joint smoother such as our S-Polybond **FUGEN** *profi*.

During application and curing (vulcanisation) of the sealant, make sure that there is sufficient air supply. This applies both when using the sealant for permanently elastic joints and when using it as an adhesive.

In case of doubt and for specific queries, contact S-Polybond.

### 4.5 Restriction of use

#### Follow the listed instructions and observe the safety data sheet.

- Avoid thermal, mechanical or chemical stresses before vulcanisation is complete.
- The silicone sealant is not suitable for applications in permanent contact with water.
- The silicone sealant does not adhere to polyolefins (PE, PP, PTFE, Teflon®) or bituminous substrates.
- The silicone sealant is not suitable for use in direct contact with natural stone.
- For bondings that require a high initial adhesion, we recommend our **MONTAGE** profi.
- The silicone sealant cannot be painted over.
- SILIKON *profi* is compatible with most common edge seals of insulating glass and PVB film of VSG. Due to the large number of sealing systems on the market and the fact that their composition can be changed without any indication from the manufacturer, manufacturers, this declaration does not guarantee compatibility with all sealing systems.

In case of doubt and for specific queries, please contact S-Polybond.



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# 5 - Cleaning

### 5.1 General cleaning instructions

#### Clean before drying.

Clean tools and contact surfaces with spirit or a similar solvent.

Make sure that the cleaning agent used is compatible with the surface in order to avoid damage to the surfaces.

#### Clean after drying.

Remove the hardened sealant from tools and contact surfaces as mechanically with a scraper, knife or a special silicone joint remover. Afterwards, any remaining residues of the silicone sealant can be removed with a silicone remover, e.g. S-Polybond **SILIKON***clean*.

Always ensure the surface compatibility of the silicone remover used.

# 6 - Storage

#### 6.1 General storage instructions

The optimum storage temperature for our silicone sealant SILIKON profi is between +5 °C and +25 °C.

Storage temperature Shelf life

5 °C to 25 °C 15 months

Deviating temperatures may affect the stated shelf life..

# 7 - Technical approvals

## 7.1 Approvals and standards for usability

SILIKON profi has a CE mark and is classified as very low emission.

Our silicone sealant is certified according to ISO 9001 (requirements for certification of quality management systems) and ISO 14000:2004 (Environmental management systems - Requirements with guidance for use).





\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant da A+ (très faibles émissions) à C (fortes èmissions).

# 8 - Supplier identification

8.1 Contact details of the supplier

### S-Polytec GmbH

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Changes compared to the previous version Change of contact information Change of the product shelf life