

PRODUCT DATA SHEET

Sikaflex® PRO-3 WF

ELASTIC POLYURETHANE SEALANT WITH A MOVEMENT CAPACITY OF 25%

DESCRIPTION

Sikaflex® PRO-3 WF is a flexible, 1-component sealant based on polyurethane with good mechanical resistance and a permissible movement capacity of 25%. Sikaflex® PRO-3 WF reacts with air humidity and turns into an elastic sealant.

USES

Sikaflex® PRO-3 WF is versatile and therefore suitable for various fields of use. Design of joints must be matched to the individual conditions of the project.

- Floor joints
- Floor joints in areas exposed to chemicals
- Joints in waste water and sewage treatment plants with domestic sewage
- Joints in tunnel construction

CHARACTERISTICS / ADVANTAGES

- Movement capacity 25%
- Flexible
- Bubble-free curing
- Good mechanical and chemical resistance
- Excellent adhesion to most construction materials

APPROVALS / STANDARDS

Conforms to ISO 11600 F 25 HM.
Tested according to the Principals of DIBT for Waste Water Exposure ISEGA Certificate for foodstuff area usage.

PRODUCT INFORMATION

Chemical base	Polyurethane, 1-pack, moisture curing
Packaging	Unipacs at 600 ml (1 carton = 20 unipacs)
Colour	Concrete grey
Shelf life	15 months from date of production if stored in cool (at +10 °C to 25 °C) and dry conditions, in original sealed containers. Protect from direct sun radiation.
Storage conditions	Sikaflex® PRO-3 WF shall be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5 °C and +25 °C.
Density	Approx. 1.30 kg/l

TECHNICAL INFORMATION

Shore A Hardness	Approx. 35 (in conformity with DIN 53505, after preparation as per DIN 52 455 part 2)
Elastic Recovery	~80 % (DIN EN 27 389)

Movement Capability

25 % (related to initial width of joint)

CHEMICAL RESISTANCE

Sikaflex® PRO-3 WF was tested by the Polymer Institute according to the construction and testing rules of DIBt (German Institute of construction) for Sikafloor bund area system as well as for sewers and sewage treatment plants as per DIN 52 452, part 2.

Testing group	Name	Testing time	Classification
1	3 - and - 4 Star petrol	24h / 72h	(+) / (+)
3	Fuel oil EL, diesel oil as well as unused lubrication oils	24h / 72h	+ / +
4a*	Benzol and benzol containing mixtures	24h / 72h	(+) / (+)
5	Alcohols, glycolether	24h / 72h	(+) / -
6	Aliphatic halogenated – hydrocarbons	24h / 72h	(+) / -
7	Aliphatic ester and ketones	24h / 72h	+ / -
8	Aliphatic aldehydes	24h / 72h	+ / +
9	Watery solution of organic acids up to 10%	24h / 72h	+ / +
10	Organic acids (carboxylic acid) except formic acid	24h / 72h	+ / +
11	Anorganic lyes	24h / 72h	+ / +
12	Anorganic solutions, non-oxidizing salts	24h / 72h	+ / +
13	Amines	24h / 72h	- / -
14.1	Watery solutions of organic tensides	24h / 72h	+ / +
14.2	Watery solutions of organic tensides	24h / 72h	+ / +

* Testing group 4a includes testing group 2-4b

Note:

+ resistant (+) limited resistance (swelling possible) - not resistant

In case of chemical exposure the resistance of the sealant is limited.

Joints exposed to chemicals are service joints and may have to be refurbished after exposure.

Diffusion Resistance to Water Vapour

3 bar (without additional protection)
(according to the building and testing rules DIBt)

Service temperature

-40 °C min. / +70 °C max.

Joint Design

Sikaflex® PRO-3 WF is suitable for sealing joints between building elements. As an additional protection against water pressure an extra backfilling of the joint space behind the sealant - e.g. with expanded polystyrene - is strongly recommended. The sealing function (interior and exterior) may be increased by waterbars embedded into the concrete.

For a temperature differential of +40 °C we recommend:

Joint distance [m]	Min. joint width [mm]	Thickness of sealant [mm]
2	10	10
4	10	10
6	10	10
8	15	12
10	20	15

Relevant is the joint width during application of the sealant, guide temperature +10 °C

For exterior areas with temperature differential of 80 °C, we recommend:

Joint distance [m]	Min. joint width [mm]	Min. joint depth [mm]
2	10	10
4	15	12
5	18	15
6	20	15
8	30	25

APPLICATION INFORMATION

Backing Material

For Sikaflex® PRO-3 WF use only closed cell, sealant compatible foam backer rods (e.g. high-resilience polyethylene foam rod). Using the backer rod the joint depth can be limited, diameter should be approx. 20% bigger than the joint width. Use only blunt implements to avoid damage to the backer rod.

As an additional protection against water pressure an extra backfilling of the joint space behind the backfilling material - e.g. with expanded polystyrene, is strongly recommended. The sealing function (interior and exterior) may be increased by waterbars embedded into the concrete.

Sag Flow

Sag resistance Excellent (DIN EN 27 390-St-U20)

Substrate Temperature

+5 °C to +40 °C (temperature of material and substrate up to 8 hours. after application)

Curing Rate

Approx. 2 mm/24 hours (at +23 °C / 50% r.h.)

Skin time

Approx. 90 minutes (at +23 °C / 50% r.h.)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The bond areas must be of sufficient strength, dense, dry and free of oil and dust. In combination with Sika® Primer-3 N mat damp concrete is acceptable. Cleaning of joint arises must ensure that all friable particles and contaminations are removed. Concrete should normally be prepared with an angle grinder. Absorbent substrates do need a dry cleaning (by brush), non absorbent substrates a wet cleaning (de-dusting/removal of oil), metal angle profiles. The solvents must evaporate completely prior to sealing the joints. Respect recommended curing time until sealing of the joints.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

ECOLOGY, HEALTH AND SAFETY

Ecology: Do not let uncured sealant get into sewers, waters or soil.

Waste disposal: Completely emptied cartridges and unipacs are not classified as “special” refuse and may be disposed of together with household garbage. Expired material in original containers as well as only partially empty containers must be disposed of as “special” refuse. Chemical basis.

Transportation class: Non-hazardous.

Important note: To avoid rare allergic reactions, we recommend the use of rubber gloves.

Change soiled work clothes and wash hands before breaks or after finishing work.

Transport: Non-hazardous.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika'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. Sika 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.

Sika Limited (Vietnam)

Nhon Trach 1 Industrial Zone,
Nhon Trach Dist., Dong Nai Province,
Tel: (84-251) 3560 700
Fax: (84-251) 3560 699
sikavietnam@vn.sika.com
vnm.sika.com



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