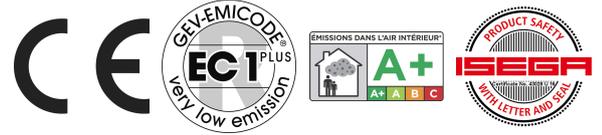


PRODUCT DATA SHEET

Sikaflex®-11 FC Purform®

Purform® multipurpose elastic adhesive and joint sealant



DESCRIPTION

Sikaflex®-11 FC Purform® is a 1-part "All-in-one" moisture curing elastic adhesive and sealant. It is used for interior and exterior multipurpose bonding and joint sealing. It has good and durable adhesion to most construction materials.

USES

An adhesive to bond construction components and materials such as:

- Concrete
- Masonry
- Reconstituted or cast stone
- Ceramic
- Wood
- Metal
- Glass

A sealant to seal vertical and horizontal joints.

CHARACTERISTICS / ADVANTAGES

- Movement capability of $\pm 25\%$
- Easy to apply and non-sagging
- Bonds well to most construction materials
- Good mechanical and weathering resistance
- Very low monomer content
- No training on the safe use of diisocyanates (REACH) required
- Adhesive-sealant with CE marking

SUSTAINABILITY

- Conformity with LEED v4 EQc 2: Low-Emitting Materials
- VOC emission classification GEV-Emicode EC1PLUS, license number 11290/20.10.00
- Class A+ according to French Regulation on VOC emissions
- VOC emission classification of building materials RTS M1

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 15651-1 - Sealants for non-structural use in joints in buildings - Facade elements - F EXT-INT CC 25HM
- CE Marking and Declaration of Performance to EN 15651-3 - Sealants for non-structural use in joints in buildings - Sealants for joints for non-structural use in sanitary areas - XS 3
- CE Marking and Declaration of Performance to EN 15651-4 - Sealants for non-structural use in joints in buildings - Sealants for pedestrian walkways - PW EXT-INT CC 25HM
- Migration Behaviour EN 1186, EN 13130, CEN/TS 14234, Sikaflex®-11 FC Purform, ISEGA, Certificate No. 54312 U 21

PRODUCT INFORMATION

Composition	Sika® Purform® polyurethane	
Packaging	300 ml cartridge	12 cartridges per box
	300 ml cylindrical foil pack	20 foil packs per box
	600 ml cylindrical foil pack	20 foil packs per box
	Refer to current price list for packaging variations	
Shelf life	15 months from the date of production	
Storage conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +25 °C. Always refer to packaging.	
Colour	White, black, grey, brown and beige	
Density	~1.35 kg/l	(ISO 1138-1)

TECHNICAL INFORMATION

Shore A hardness	~33 (after 28 days)	(ISO 868)
	Time	Final hardness development (+23 °C / 50 % r.h.)
	1 day	60 %
	2 days	85 %
	3 days	100 %
Tensile strength	~1.8 N/mm ²	(ISO 37)
Secant tensile modulus	~0.6 N/mm ² at 100 % elongation (+23 °C)	(ISO 8339)
Tensile strain at break	~800 %	(ISO 37)
Movement capability	± 25 %	(ISO 9047)
Lap shear strength	~1.0 MPa	(ISO 4587)
Elastic recovery	~85 %	(ISO 7389)
Tear propagation resistance	~8.0 N/mm	(ISO 34)
Service temperature	-40 °C min. / +80 °C max.	
Chemical resistance	Resistant to many chemicals. Contact Sika® Technical Services for additional information.	

Joint design The joint dimensions must be designed to suit the movement capability of the sealant. The joint width must be ≥ 10 mm and ≤ 35 mm. A width to depth ratio of 1:0.5 for facade joints and a width to depth ratio of 1:0.8 for floor joints must be maintained (for exceptions, see table below).

Typical joint dimensions for joints between concrete elements:

Joint distance (m)	Minimum joint width (mm)	Minimum joint depth (mm)
2	10	10
4	15	10
6	20	10
8	30	15
10	35	17

Minimum joint width for perimeter joints around windows is 10 mm. All joints must be correctly designed and dimensioned in accordance with the relevant standards and codes of practice before their construction. The basis for calculation of the necessary joint widths are the type of structure,

dimensions, technical values of the adjacent building materials, joint sealing material and the specific exposure of the building and the joints. Joints ≤ 10 mm in width are for crack control and therefore non-movement joints.

For larger joints contact Sika Technical Services for additional information.

APPLICATION INFORMATION

Consumption

Sealing

Approximate consumption for floor joints

Joint width [mm]	Joint depth [mm]	Joint length [m] per 300 ml	Joint length [m] per 600 ml
10	10	3	6
15	12–15	1.5	2.5–3
20	17	0.9	1.8
25	20	0.6	1.2
30	25	0.4	0.8

Minimum joint width for perimeter joints around windows is 10 mm. Consumption depends on the roughness and absorbency of the substrate. These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Yield

Bonding

Yield 1 Cartridge (300 ml)

~15 m bead

Dimension

Nozzle diameter = 5 mm
(~20 ml per linear meter)

Yield depends on the roughness and absorbency of the substrate. These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Sag flow

0 mm (20 mm profile, +23 °C)

(ISO 7390)

Ambient air temperature

+5 °C min. / +40 °C max.

Relative air humidity

30 % to 90 %

Substrate temperature

+5 °C min. / +40 °C max. Minimum +3 °C above dew point temperature

Backing material

Use closed cell, polyethylene foam backing rod

Curing rate

~4.0 mm / 24 hours (+23 °C / 50 % r.h.)

(CQP* 049-2)

*Sika Corporate Quality Procedure

Skimming time

~50 min (+23 °C / 50 % r.h.)

(CQP 019-1)

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.

FURTHER INFORMATION

- Pre-treatment Sealing and Bonding Chart
- Method Statement: Joint Sealing
- Method Statement: Joint Maintenance, Cleaning and Renovation
- Technical Manual: Facade Sealing

IMPORTANT CONSIDERATIONS

- Sika® Purform® polyurethanes are a monomeric diisocyanate with a content of less than 0.1 % by

weight. Therefore, users do not require a training on the safe use of diisocyanates according to Commission Regulation (EU) 2020/1149.

- For good workability, the adhesive temperature must be +20 °C.
- Application during high temperature changes is not recommended (movement during curing).
- Before bonding or sealing, check adhesion and compatibility of paints and coatings by carrying out preliminary trials.
- Sikaflex®-11 FC Purform® can be overpainted with most conventional water-based coating and paint systems. However, paints must first be tested to ensure compatibility by carrying out preliminary trials. The best over-painting results are obtained when the adhesive is allowed to fully cure first. Note: non-flexible paint systems may impair the elasticity of the adhesive and lead to cracking of the paint film.
- Colour variations may occur due to the exposure in

PRODUCT DATA SHEET

Sikaflex®-11 FC Purform®

November 2021, Version 04.01

02051301000000077

service to chemicals, high temperatures and/or UV-radiation (especially with white colour shade). This effect is aesthetic and does not adversely influence the technical performance or durability of the product.

- Always use Sikaflex®-11 FC Purform® in conjunction with mechanical fixings for overhead applications or heavy components.
- For very heavy components provide temporary support until Sikaflex®-11 FC Purform® has fully cured.
- Full surface applications / fixings are not recommended since the inner part of the adhesive layer may never cure.
- Before using on reconstituted, cast or natural stone, contact Sika Technical Services.
- Do not use on bituminous substrates, natural rubber, EPDM rubber or on any building materials which might leach oils, plasticisers or solvents that could degrade the adhesive.
- Do not use on polyethylene (PE), polypropylene (PP), polytetrafluoroethylene (PTFE / Teflon), and certain plasticised synthetic materials. Preliminary trials are recommended or contact Sika® Technical Services.
- Do not use to seal joints in and around swimming pools.
- Do not use for joints under water pressure or for permanent water immersion.
- Do not use to seal glass.
- Do not use for bonding glass if the bond line is exposed to sunlight.
- Do not use for structural bonding.
- Do not expose uncured Sikaflex®-11 FC Purform® to alcohol containing products as this may interfere with the curing reaction.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be sound, clean, dry and free of all contaminants such as dirt, oil, grease, cement laitance, old sealants and poorly bonded paint coatings which could affect adhesion of the adhesive / sealant. The substrate must be of sufficient strength to resist with the stresses induced by the sealant during movement. Removal techniques such as wire brushing, grinding, sanding or other suitable mechanical tools can be used.

All dust, loose and friable material must be completely removed from all surfaces before application of any activators, primers or adhesive / sealant.

Sikaflex®-11 FC Purform® adheres without primers and/or activators.

However, for adhesion to many substrates, joint durability and critical, high performance applications the following priming and/or pre-treatment procedures must be followed:

Non-porous substrates

Aluminium, anodised aluminium, stainless steel, PVC, galvanised steel, powder coated metals or glazed tiles, slightly roughen surface with a fine abrasive pad.

Clean and pre-treat using Sika® Cleaner P or Sika® Aktivator-205 applied with a clean cloth.

Before bonding / sealing, allow a waiting time of > 15 minutes (< 6 hours).

Other metals, such as copper, brass and titanium-zinc, clean and pre-treat using Sika® Cleaner P or Sika® Aktivator-205 applied with a clean cloth. After a waiting time of > 15 minutes (< 6 hours). Apply Sika® Primer-3 N by brush.

Allow a further waiting time of > 30 minutes (< 8 hours) before bonding / sealing,

PVC has to be cleaned and pre-treated using Sika® Primer-215 applied with a brush.

Before bonding / sealing, allow a waiting time of > 15 minutes (< 8 hours).

Porous substrates

Concrete, aerated concrete and cement-based renders, mortars and bricks, prime surface using Sika® Primer-3 N or Sika® Primer-115 applied by brush.

Before bonding / sealing, allow a waiting time of > 30 minutes (< 8 hours).

Note: Primers and activators are adhesion promoters and not an alternative to improve poor preparation / cleaning of the joint surface. Primers also improve the long-term adhesion performance of the sealed joint.

Contact Sika Technical Services for additional information.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika® Remover-208 immediately after use. Once cured, hardened material can only be removed mechanically. For cleaning skin use Sika® Cleaning Wipes-100.

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.

LEGAL NOTES

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in

PRODUCT DATA SHEET

Sikaflex®-11 FC Purform®

November 2021, Version 04.01

02051301000000077

agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

Sika Danmark A/S
Hirsemarken 5
3520 Farum
Tlf. +45 48 18 85 85
www.sika.dk



PRODUCT DATA SHEET
Sikaflex®-11 FC Purform®
November 2021, Version 04.01
02051301000000077

Sikaflex-11FCPurform-en-DK-(11-2021)-4-1.pdf

