BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex® PRO-3 Purform®

POLYURETHANE SEALANT FOR FLOOR AND CIVIL ENGINEERING APPLICATIONS

DESCRIPTION

Sikaflex® PRO-3 Purform® is a 1-part, moisture curing, elastic polyurethane sealant. It seals many kinds of joint configurations in floors and civil engineering structures. The elasticity is maintained over a wide temperature range and high mechanical and chemical resistance provides good durability.

USES

The Product is used for the following horizontal and vertical interior and exterior joint sealing applications:
- Food industry
- Clean rooms
- Warehouse and production floor areas
- Sewage treatment plants
- Tunnels
- Car park decks
- Pedestrian and traffic areas
- Schools and childcare centers
- Prisons and detention facilities

FEATURES

- High movement capability: ±25% (ISO 9047), ±50% (ASTM C719)
- Fast development of mechanical properties
- Very good mechanical resistance
- Extended application range to lower temperatures
- Very good resistance to specific chemicals
- Very good resistance to weathering
- Pick and tamper resistant
- Non-staining to a wide range of substrates
- Monomeric diisocyanate content <0.1%: no user safety training needed (REACH restriction 2023, Annex XVII entry 74)
- Bubble-free curing
- Good adhesion to many construction materials

SUSTAINABILITY

- Green Building Council of Australia Green Star Design & As Built V1.3-13.1.1B
- Green Building Council of Australia Green Star Interiors V1.3-12.1.1B
- Contributes towards satisfying Indoor Enviornmental Quality (EQ) Credit: Low-Emitting Materials under LEED® v4 - 1—3 points
- VOC emission classification GEV Emicode EC1PLUS

CERTIFICATES AND TEST REPORTS

- AS/NZS 4020:2018 - Potable drinking water approved
- Green Building Council Of Australia, Low VOC V1.3-13.1.1B & V1.3-12.1.1B
- CE marking and declaration of performance based on EN 15651-1:2012 Sealants for non-structural use in joints in buildings and pedestrian walkways — Part 1:Sealants for facade elements
- CE marking and declaration of performance based on EN 14188-2:2004 Joint fillers and sealants — Part 2: Specifications for cold applied sealants
- CE marking and declaration of performance based on EN 15651-4:2012 Sealants for non-structural use in joints in buildings and pedestrian walkways — Part 4: Sealants for pedestrian walkways
- Tensile Properties, Adhesion, Change of Volume tests ISO 11600 F Class 25 HM
- Standard Specification for Elastomeric Joint Sealants, ASTM C 920
- Chemical Resistance, DIN EN 14187, SKZ, Report No. 208323/20.
- Determination of the staining, ASTM 1248-04, SKZ, Report No.205279/19-VI
- Waste water, DIBt, SKZ, Test Report No. 205279/19-V
- Outgassing VOC/SVOC, CSM procedures, Fraunhofer, Certificate, No. SI 1909-1140
- Testing of joint sealant for pedestrian walkways ISO 11618, SKZ, No. 205279/19-VII
- Sealants -Durability to extension compression, ISO 19862,Sikaflex® PRO-3 Purform

PRODUCT INFORMATION

Composition	Sika® Purform® Polyurethane	
Packaging	600 ml cylindrical foil pack 20 foil packs per box	
Colour	Concrete Grey	
Shelf life	15 months from date of production	
Storage conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +25°C. Always refer to packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.	
Density	1.30 kg/l	(ISO 1183-1)
Product declaration	EN 15651-1:2012 — F EXT-INT CC 25 HM EN 15651-4:2012 — PW EWT-INT CC 25 HM EN 14188-2:2024 — Class 35 ISO 11600:2002 — Class 25 HM F ASTM C 920-18 — Type S, Grade NS, Movement Class 50, Use T1, Use NT, Use I Class 2, Use M	
Green building	13 grams per litre as VOC content	

TECHNICAL INFORMATION

Shore A hardness	~40 (after 28 days) **80% of final hardness** — **Time** +5°C — 6 days +10°C — 5 days +23°C — 2 days +40°C — 1 day	(EN ISO 868)
Secant tensile modulus	At +23°C and 100% elongation 0.65 N/mm² At -20°C and 100% elongation 1.00 N/mm²	(ISO 8339)
Tensile strain at break	~800%	(ISO 37)
Elastic recovery	~90%	(EN ISO 7389)
Tear propagation resistance	~9.0 N/mm	(ISO 34-2)
Movement capability	± 25% ± 35% ± 50%	(EN ISO 9047) (EN 14188-2) (ASTM C719)
Chemical resistance	Resistant to many chemicals. Refer to the following test reports about chemical resistance: Chemical Resistance, DIN EN 14187, SKZ, Report No. 209323/20. Refer to the following test reports about water and salt watrer: Sikaflex-Pro-3 Purform EN 15651-4 2020 EN 205279-II. or Contact Sika Technical Services for addtional information.	
Resistance to weathering	High resistance to weathering (10 cycles)	(ISO 19862)
Service temperature	Maximum — +80°C Minimum — -40°C	

Joint design	For movement joints, the width must be at least 8 mm and should not exceed 40 mm. For non-movement joints such as connection joints in interior areas, the joint width can be less than 8 mm. The joint dimensions must be designed to suit the movement capability of the sealant. In all cases joints must be at least 8 mm deep, or a have a width to depth ratio of 1 : 0.5 for the facade joints or 1 : 0.8 for floor joints whichever is greater. For more information about joint design and calculations refer to the Sika document Design guideline: Dimensioning of construction joints or contact Sika Technical Services.
Contact with water	Potable Water Approved (AS/NZS 4020:2018)

APPLICATION INFORMATION

Consumption

Joint width	Joint depth	Joint length per 600 ml foil pack
10 mm	8 mm	7.5 lm
15 mm	8 mm	5.0 lm
20 mm	10 mm	3.0 lm
25 mm	12 mm	2.0 lm
30 mm	15 mm	1.3 lm

Backing material	Use closed cell, polyethylene foam backing rod	
Sag flow	0 mm (20 mm profile, tested at +50°C)	(EN ISO 7390)

Material temperature

Maximum	+40°C
Minimum	+5°C

Ambient air temperature

Maximum	+40°C
Minimum	0°C

For applications at temperatures below +5°C, please contact Sika® Technical Services.

Substrate temperature

Maximum	+40°C
Minimum	0°C

Note: The substrate temperature must be +3°C above dew point temperature and free from frost and ice.

Curing rate	~3.5mm / 24 hours	At +23°C / 50% R.H.	(CQP 049-2)
Skinning time	~50 minutes	At +23°C / 50% R.H.	(CQP 019-1)
Tooling time	~40 minutes	At +23°C / 50% R.H.	(CQP 019-2)

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 DOCUMENTATION

- Pre-treatment Sealing & Bonding Chart
- Method Statement Joint Sealing
- Method Statement Joint Maintenance, Cleaning and Renovation
- Sika® Additional Technical Information: Dimensioning of construction joints

SPECIFICATION INFORMATION

Adhesion tests on project specific substrates must be performed and procedures agreed with all parties before full project application. For more information contact Sika® Technical Services.

IMPORTANT CONSIDERATIONS

- Do not use the Sikaflex® PRO-3 Purform® on stone substrates. Staining from plasticiser migration may occur when used on cast, reconstituted or natural stone substrates.
- Do not use the Sikaflex® PRO-3 Purform® to seal joints in and around swimming pools containing water treatment agents such as chlorine.

- Do not expose the Sikaflex® PRO-3 Purform® to alcohol containing products during the curing period as this may interfere with the curing reaction and cause the Sikaflex® PRO-3 Purform® to remain soft and / or tacky.
- 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 sealant.
- 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.
- When using Sikaflex® PRO-3 Purform® for joints under water pressure or for permanent water immersion, Sika® Primer 3N must be used.
- Before bonding or sealing, check adhesion and compatibility of paints and coatings by carrying out preliminary trials.
- Sikaflex® PRO-3 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 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.

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 coatings which could affect adhesion of the primer and sealant. The substrate should be of sufficient strength to withstand with the stress induced by the sealant during movement. Use techniques such as wire brushing, grinding, grit blasting or other suitable mechanical methods to remove all weak substrate material. Repair all damaged joint edges with suitable Sika® repair products. Remove all dust, loose and friable material from all surfaces before application activators, primers or sealant.
Where joints in the substrate are saw cut, after saw cutting, all slurry material must be flushed away and joint surfaces allowed to dry.
For optimum adhesion and joint durability of critical, high performance applications such as joints on multi-storey buildings, highly stressed joints and extreme weather exposure the following priming and/or pre-treatment procedures must be followed:

NON-POROUS SUBSTRATES

Aluminium, anodised aluminium, stainless steel, galvanised steel or glazed tiles

- Lightly roughen the surface with a fine abrasive pad.
- Clean the surface.
- Pretreat the surface using Sika® Aktivator-205 applied with a clean cloth.

Other metals, such as brass, bronze, copper and titanium-zinc

- Lightly roughen the surface with a fine abrasive pad.
- Clean the surface.
- Pretreat the surface using Sika® Aktivator-205 with a clean cloth.
- Allow a waiting time.
- Apply Sika® Primer-3 N by brush.

Powder-coated metals

- Perform preliminary trials to verify adhesion. For more information contact Sika® Technical Services.

PVC

- Clean and prime the surface using Sika® Primer-215 applied with a brush.

POROUS SUBSTRATES

Concrete, aerated concrete and cement based renders, mortars and bricks.

IMPORTANT: Avoid excessive application of primer causing puddles.

- Prime surface using Sika® Primer-3 N applied by brush.

ASPHALT (ACC. TO EN 13108-1 AND EN 13108-6)

Fresh cut or existing cut asphalt must have a clean bonding surface with a minimum of 50% exposed aggregate.
IMPORTANT: Avoid excessive application of primer causing puddles.

- Prime the surface using Sika® Primer-3 N applied by brush.

Note: Primers are adhesion promoters and mprove the long term adhesion performance, not an alternative to improve poor preparation and cleaning of the joint surface.

APPLICATION METHOD / TOOLS

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

Masking

It is recommended to use masking tape where neat or exact joint lines are required. Remove the tape within the skin time after finishing.

Joint Backing

After the required substrate preparation, insert a suitable backing rod to the required depth.

Priming

Prime the joint surfaces as recommended in substrate preparation. Avoid excessive application of primer causing puddles at the base of the joint.

Application
Prepare the end of the cartridge / foil pack before or after inserting into the sealant gun then fit the nozzle. Extrude Sikaflex® PRO-3 Purform® into the joint ensuring that it comes into full contact with the sides of the joint and avoiding any air entrapment.

Finishing
As soon as possible after application, sealant must be firmly tooled against the joint sides to ensure adequate adhesion and a smooth finish. Use a compatible tooling agent (e.g. Sika® Tooling Agent N) to smooth the joint surface. Do not use tooling products containing solvents.

CLEANING OF EQUIPMENT

Clean all tools and application equipment immediately after use with Sika® Remover-208. Once cured, hardened material can only be removed mechanically. For cleaning skin use Sika® Cleaner-350H.

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

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.

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