BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex® Tank Purform®

High performance polyurethane sealant for floor joints with high chemical resistance agains hydrocarbons

PRODUCT DESCRIPTION

Sikaflex® Tank Purform® is used in areas intended for the storage, filling, and handling of water-polluting liquids, such as floor joints in petrol stations, joints in handling areas, storage tanks and containment bunds, as well as movement and connection joints in parking garages. The product should be used by professional applicators only.

USES

Sikaflex® Tank Purform® is used for interior and exterior applications.
Sikaflex® Tank Purform® is used for both vertical and horizontal applications.
Sikaflex® Tank Purform® is used for the following areas:

- Petrol stations
- Areas used for handling water-polluting liquids
- Containment bunds
- Parking and garage

Please note:

- The product may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- Easy to apply
- Very good resistance to hydrocarbons like fuels, oils and many other chemicals
- Very good mechanical resistance
- High movement capability: ±25 % (ISO 9047), ±50 % (ASTM C719)
- Monomeric diisocyanate content < 0.1 %: no user safety training needed (REACH restriction 2023, Annex XVII entry 74)
- Low VOC emissions

PRODUCT INFORMATION

Chemical Base	Sika® Purform® Polyurethane	
Packaging	600 mL 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 the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.	
Density	1.3 kg/L	(ISO 1183-1)

Product Declaration	EN 15651-4	PW EXT-INT CC Class 25 HM
	EN 14188-2:2004	Class 35
	ASTM C920-18	Type S, Grade NS, Movement Class 50 Use T1, Use NT, Use I Class 2, Use M
	DIBt	Approval under testing

TECHNICAL INFORMATION

Shore A Hardness	Cured 28 days at +23 °C and 50 % r.h.	37	(EN ISO 868)
Secant Tensile Modulus	Cured 28 days at +23 °C and 50 % r.h. Measured at 100% elongation at +23 °C	0.6 N/mm²	(ISO 8339)
	Cured 28 days at +23 °C and 50 % r.h. Measured at 100% elongation at -20 °C	1.05 N/mm²	
Elastic Recovery	80 %		(EN ISO 7389)
Tear Propagation Resistance	Cured 7 days at +23 °C and 50 % r.h.	7.0 N/mm	(ISO 34-2)
Movement Capability	± 25 %		(EN ISO 9047)

Chemical Resistance

CHEMICAL RESISTANCE ACCORDING TO EN 14187-6

Acids	**8h**	**72h**
Hydrochloric acid 5 %	+++	++
Nitric acid 10 %	+++	++
Sulphuric acid 10 %	+++	-
Acetic acid 5 %	+++	-
Lactic acid 20 %	+	-
Citric acid 50 %	+	-

Hydrocarbons	**8h**	**72h**
Super gasoline	+++	+
Diesel	+++	+++
Kerosene	+++	+
Xylene 100%	+	-
Engine oil 100%	+++	++
Sunflower oil	+++	+++
Vegetable oil	++	(+)

Alcohols	**8h**	**72h**
Ethylene glycol 100 %	+++	++
Ethanol 100 %	+	-
Methanol 100 %	-	-
Glycerine 100 %	+	+

Ketones	**8h**	**72h**
Acetone 100 %	-	-
Methylethylketone 100 %	-	-

Alkalines	8h	72h
Potassium Hydroxide 20 %	+++	+++
Sodium hydroxide 10 %	+++	+++
Ammonia 25 %	+++	++
Calcium hydroxide (saturated)	+++	+++

Others	8h	72h
Sodium hypochlorite 12 %	+++	+++
Hydrogen peroxide 3 %	+++	++
Tenisde PF 14 DIBT	+++	+++
Water distilled 100 %	+++	+++
Sea Water	+++	+++

Legend

+: neither adhesive nor cohesive failure (Requirement according to EN 14187-6:2017-07

++: neither adhesive nor cohesive failure and change of modulus <50 % after immersion in test liquid

+++: neither adhesive nor cohesive failure change of modulus <20 % after immersion in test liquid (EN 14188-2:2014 draft)

-: adhesive or cohesive failure occurred

For additional information about chemical resistance, contact Sika technical service.

Service Temperature

Maximum	+70 °C
Minimum	-40 °C

Joint Design

For more information about joint design and calculations refer to the Sika document Design guideline: Dimensioning of construction joints or contact Sika Technical Services.
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 2 : 1 whichever is greater.

Elongation at break

750 % (ISO 37)

APPLICATION INFORMATION

Backing Material

Use closed cell, polyethylene foam backing rod.

Product Temperature

Maximum	+40 °C
Minimum	5 °C

Ambient Air Temperature

Maximum	+40 °C
Minimum	+5 °C

Substrate Temperature

Maximum	+40 °C
Minimum	5 °C

Curing Time

3.5 mm / 24 hours (CQP049-2)

Skin Time

At +23 °C and 50 % r.h. 55 minutes (CQP019-1)

Tooling Time

At +23 °C and 50 % r.h. 50 minutes

VALUE BASE

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.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

IMPORTANT

Poor adhesion due to incorrect priming procedure

Incorrectly defined or uncontrolled priming procedures may lead to a variation in Product performance.

1. Test adhesion on project-specific substrates and agree on procedures with all parties before full project application. For more information contact Sika Technical Services.

Poor adhesion due to inadequate surface preparation

Note: Primers are adhesion promoters. Primers cannot replace proper surface preparation and surface cleaning.

1. Do not use primers for improving poorly prepared or poorly cleaned joint surfaces.

The substrate must be sound, clean, dry and free of contaminants such as dirt, oil, grease, cement laitance, sealant residues and poorly bonded coatings which could affect adhesion of the primer and sealant.

The substrate must be of sufficient strength to withstand the stress induced by the sealant during movement.

1. Use techniques such as wire brushing, grinding, grit blasting or other suitable mechanical methods to remove all weak substrate material.
2. Repair all damaged joint edges with suitable Sika repair products.
3. Remove dust, loose and friable material from all surfaces before applying the sealant.

If tested or supported by experience, the Product can be used without primers or activators on many substrates.

Use the following priming or pre-treatment procedures to ensure optimum adhesion and joint durability, or if the Product is used for high-performance applications such as joints on multi-storey buildings, highly stressed joints, or joints exposed to extreme weather.

NON-POROUS SUBSTRATES

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

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

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

1. Lightly roughen the surface with a fine abrasive pad.
2. Clean the surface.
3. Pretreat the surface with Sika® Aktivator-205 applied with a clean cloth.
4. Wait until the flash-off time is over.
5. Prime the surface with Sika® Primer-3 N applied with a brush.

Powder-coated metals

1. Carry out preliminary trials to verify adhesion. For more information contact Sika Technical Services.

PVC substrates

1. Prime the surface with Sika® Primer-215 applied with a brush.

POROUS SUBSTRATES

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

1. IMPORTANT Avoid excessive application of primer to avoid causing puddles. Prime the surface with Sika® Primer-3 N or Sika® Primer-115 applied with a brush.

Concrete that is 2–3 days old, or matt wet (surface dry)

1. Prime the surface with Sika® Primer-115 applied with a brush.

APPLICATION

IMPORTANT

Strictly follow installation procedures

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

IMPORTANT

Staining on natural stone substrates due to plasticiser migration

Staining from plasticiser migration may occur when used on cast, reconstituted or natural stone such as granite, marble or limestone substrates.

1. Do not use on natural stone substrates

IMPORTANT

Degradation of sealant due to chemical attack

1. Do not use the Product to seal joints in and around swimming pools containing water treatment agents such as chlorine.

IMPORTANT

Insufficient curing due to exposure to alcohol

Exposure to alcohol during curing may interfere with the curing reaction and cause the Product to remain soft or become tacky.

1. Do not expose the Product to alcohol-containing products during the curing period.
2. Apply masking tape where neat or exact joint lines are required.
3. After the required substrate preparation, insert a backing rod to the required depth.
4. Prime the joint surfaces as recommended in substrate preparation. Note Avoid excessive application of the primer.
5. Open the seal on the top of the cartridge or open the end of the foil pack.
6. Fit the nozzle and cut it to the desired bead size.
7. Insert the Product into the application gun.
8. Apply the Product into the joint. Note Avoid air entrapment. Make sure that the Product comes into full contact with the adhesion area of the joint.

9. IMPORTANT Do not use tooling products containing solvents. As soon as possible after application, tool the Product firmly against the joint sides to ensure adequate adhesion and a smooth finish. Use a compatible tooling agent such as Sika® Tooling Agent N to smooth the joint surface.
10. Remove the masking tape within the skin formation time of the Product.

OVERPAINTING THE SEALANT

IMPORTANT

Tacky paint due to plasticiser migration

Paints and sealants or adhesives may contain plasticizers and other substances that migrate and can cause the painted surface to become tacky.

IMPORTANT

Cracking paint due to joint movement

Rigid paint applied on top of a sealant or flexible adhesive may crack when used on joints subject to movement.

The Product can be overpainted with most conventional paint coating systems.

1. Allow the Product to fully cure before overpainting.
2. Before overpainting, carry out preliminary trials to test compatibility of the paint or coating system with the Product in accordance with ISO/TR 20436:2017 – Buildings and civil engineering works — Sealants — Paintability and paint compatibility of sealants.

Colour variation

Note: Colour variation may occur especially with light colour shades. This effect is purely aesthetic and does not adversely influence the technical performance or durability of the Product.

CLEANING OF TOOLS

Clean all tools and application equipment immediately after use with Sika® Remover-208 or Sika® Wonder Wipes. Once cured, hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

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

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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