

PRODUCT DATA SHEET

Sikaplan® WT 4220-15 C

1.5 mm thick FPO sheet waterproofing membrane for water tanks

PRODUCT DESCRIPTION

Sikaplan® WT 4220-15 C is a 1.5 mm thick sheet waterproofing membrane. It contains an inlay for restraint and is based on flexible polyolefin (FPO-PE).

USES

The Product is designed for:

- Lining of enclosed potable water tanks
- Lining of enclosed non-potable water tanks (sprinkler tanks, etc.)

Please note:

- Do not use the Product in areas where it is exposed to weathering or UV-light.
- The Product is not suitable for permanent exposure to liquids with temperatures above +40 °C.
- The Product is not resistant to frequent or permanent exposure to water with a content of free chlorine exceeding 0.8 mg/l.

CHARACTERISTICS / ADVANTAGES

- Certified for contact with water for human consumption
- Easy to clean and low maintenance
- Proven performance over decades
- Contains no fungicides, heavy metals, halogens or plasticisers
- Good resistance to ageing
- Good resistance to microbial degradation
- High tensile strength and elongation
- Hot air weldable
- Flexible in very cold temperatures
- Suitable for contact with acidic (soft) water

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 13361 — Geosynthetic barriers — Characteristics required for use in the construction of reservoirs and dams
- CE Marking and Declaration of Performance to EN 13967 — Flexible sheets for waterproofing - Damp proofing and basement tanking
- Water Regulations Material Approval BS 6920-1 (WRAS UK)

PRODUCT INFORMATION

Chemical Base	FPO/PE	
Packaging	Roll width	2 m
	Roll length	20 m or specified
Shelf Life	5 years from date of production	
Storage Conditions	The Product must be stored in original unopened and undamaged sealed packaging in dry conditions and temperatures between +5 °C and +35 °C. Protect the Product from direct weather exposure. Store in a horizontal position. Do not stack pallets of the rolls on top of each other, or under pallets of any other materials during transport or storage. Always refer to packaging.	
Appearance / Colour	Surface texture	smooth
	Colour	blue
Effective Thickness	1.50 mm (- 0.07 mm / + 0.15 mm)	(EN 1849-2)
Mass per unit area	1.30 kg/m ² (-0.06 kg/m ² / +0.13 kg/m ²)	(EN 1849-2)

TECHNICAL INFORMATION

Resistance to Impact	Method A, 500 g falling weight	Watertight at 600 mm drop height	(EN 12691)
Resistance to Static Load	No perforation at 20 kg for 24 h		(EN 12730)
Resistance to Static Puncture	2.85 kN ± 0.45 kN		(EN ISO 12236)
Tensile Strength	Longitudinal (MD)	18.5 N/mm ² ± 2.5 N/mm ²	(EN ISO 527-3)
	Transversal (CMD)	15.0 N/mm ² ± 2.0 N/mm ²	
	Longitudinal (MD)	18.5 N/mm ² ± 2.5 N/mm ²	(EN 12311-2)
	Transversal (CMD)	15.0 N/mm ² ± 2.0 N/mm ²	
Elongation at Break	Longitudinal (MD)	> 480 %	(EN ISO 527-3)
	Transversal (CMD)	> 480 %	
Resistance to Tearing (nail shank)	Longitudinal (MD)	770 N ± 77 N	(EN 12310-1)
	Transversal (CMD)	800 N ± 80 N	
Joint Shear Resistance	> 300 N / 50 mm		(EN 12317-2)
Foldability at Low Temperature	No cracks at -40 °C		(EN 495-5)
Water Tightness	Tested 24 hours at 60 kPa	pass	(EN 1928)
Microbiological Resistance	Change in tensile strength, aged 16 weeks	< 15 % (MD/CMD)	(EN 12225)
	Change in elongation, aged 16 weeks	< 15 % (MD/CMD)	
Durability of Water Tightness against Chemicals	Aged 28 days at +23 °C, tested 24 hours at 60 kPa	pass	(EN 1847)
Durability of Water Tightness against Ageing	Aged 12 weeks, tested 24 hours at 60 kPa	pass	(EN 1296)
Reaction to Fire	Class E		(EN 13501-1)

SYSTEM INFORMATION

System Structure

Ancillary Products:

- Sikaplan® WT 4220-15 C Felt
- Sikaplan® WT 4220-18 H
- Sikaplan® W Felt 300 Biocide
- Sikaplan® WT External/Internal Corner preformed 90° PE
- Sikaplan® W Flat Profile Stainless Steel
- Sikaplan® WT Fixation Plate PE
- Sarnafil® T Prep
- Sarnafil® T Clean

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

REGULATION (EC) NO 1907/2006 - REACH

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

APPLICATION INSTRUCTIONS

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.

SUBSTRATE QUALITY

For information on substrate quality / pre-treatment, refer to the following Sika® method statement:

- Sikaplan® WT 4220 sheet membrane (PE) system for lining potable water reservoirs

APPLICATION METHOD / TOOLS

For information on application, refer to the following Sika® method statement:

- Sikaplan® WT 4220 sheet membrane (PE) system for lining potable water reservoirs

IMPORTANT

Application by trained personnel

The application of this Product must only be carried out by Sika® trained and/or approved contractors, experienced in this type of application.

IMPORTANT

Ventilation in confined spaces

Always ensure good ventilation when applying the Product in a confined space.

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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Product Data Sheet

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