

**Product Data Sheet**

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Sikaplan® WT 5300-13C



EN 13661

04

1213

EN 13662

05

# Sikaplan® WT 5300 – 13C Colour

(Sarnafil® MC G 760-13)

## Sheet waterproofing membrane – Pit- and pond liner

**Product Description**

Sikaplan® WT 5300-13C is a sheet waterproofing membrane with an inlay for restraint, based on flexible polyolefines (FPO-PP).

**Uses**

- Lining of ponds for open air water reservoir
- Lining of artificial lakes and biotopes
- Lining of canals

**Characteristics / Advantages**

- Contains no solvents, fungicides, heavy metals, halogens, or plasticizers
- UV-stable (350 MJ/m<sup>2</sup> acc. to EN 12224)
- Resistant to microbial attack
- Resistant to permanent water temperature of max. +35°C
- Physiologically harmless and environmentally neutral (no volatile or extractable materials)
- Can be installed on wet substrates and on compacted soil
- Flexible in cold temperatures
- Heat weldable
- Resistant to bitumen (discoloration possible)

**Tests****Approval / Standards**

Sheet waterproofing membrane with an inlay for restraint, based on flexible polyolefin (FPO-PP) according to EN 13361 for waterproofing of pools, ponds, artificial lakes and according to EN 13362 for waterproofing of canals.

DoP 020704503000130000 1005, certified by the Factory Production Control Body, 1213, and provided with the CE Mark.

**Product Data****Form****Appearance / Colours**

Rolled sheet membrane, stabilized with glass fibre fleece.

Surface: smooth



	Membrane thickness: 1.30 mm	
	Colours: patina green, moss green, pale green, anthracite, mouse grey, granite grey, window grey, azure, blue-grey	
<b>Packaging</b>	Roll sizes: 2.00 m (roll width) x 20.00 – 200.00 m (roll lengths). Unit weight: 1.23 kg/m <sup>2</sup>	
<b>Storage</b>		
<b>Storage Conditions</b>	Rolls must be stored in their original package, in horizontal position and under cool and dry conditions. They must be protected from direct sunlight, rain, snow and ice, etc. The product does not expire during correct storage. Do not stack pallets of rolls during transport or storage.	
<b>Technical Data</b>		
<b>Product declaration</b>	EN 13361: (2004) mandatory only for European countries EN 13362: (2004)	1213-CPD-017
<b>Thickness</b>	1.30 ( -5 / + 10%) mm	EN 1849 - 2
<b>Mass per unit area</b>	1.23 ( -5 / + 10%) kg/m <sup>2</sup>	EN 1849 - 2
<b>Thermal expansion</b>	50 x 10 <sup>-6</sup> (±25 x 10 <sup>-6</sup> ) 1/K	ASTM D 696 - 91
<b>Water permeability</b>	≤ 10 <sup>-7</sup> m <sup>3</sup> x m <sup>-2</sup> x d <sup>-1</sup>	EN 14150
<b>Tensile strength</b>	Machine: 9.50 ( ± 1.5 ) N/mm <sup>2</sup> Cross: 8.50 ( ± 1.5 ) N/mm <sup>2</sup>	ISO 527 -1/3/5 ISO 527 -1/3/5
<b>Tear strength</b>	Machine: ≥ 50 kN/m Cross: ≥ 50 kN/m	ISO 34, method B; V = 50mm/min ISO 34, method B; V = 50mm/min
<b>Elongation</b>	Machine: ≥ 500% Cross: ≥ 500%	ISO 527 -1/3/5 ISO 527 -1/3/5
<b>Burst strength</b>	≥ 50%	EN 14151, D=1.00m
<b>Static puncture</b>	1.50 (± 0.20) kN	EN ISO 12236
<b>Low temperature behaviour</b>	≤ - 50°C	EN 495 - 5
<b>Weathering</b>	Remaining tensile strength and elongation ≥ 75%	EN 12224, 350 MJ/m <sup>2</sup> ; ISO 527 – 3/5/100
<b>Micro organism</b>	Change of tensile strength: ≤ 10% Change of elongation: ≤ 10%	EN 12225, ISO 527 - 3/5 EN 12225, ISO 527 - 3/5
<b>Oxidation</b>	Change of tensile strength: ≤ 25% Change of elongation: ≤ 25%	EN 14575, ISO 527 - 3/5 EN 14575, ISO 527 - 3/5
<b>Environmental stress cracking</b>	≥ 200 h	ASTM D 5397 - 99
<b>Leaching (water soluble)</b>	A (hot water): change of elongation: ≤ 10% B (alkaline liquid): change of elongation: ≤ 10% C (organic alcohol): change of elongation: ≤ 10%	EN 14415 EN 14415 EN 14415
<b>Resistance to root penetration</b>	Pass	EN 14416

## System Information

<b>System Structure</b>	<p>Ancillary Products:</p> <ul style="list-style-type: none"> <li>- Sarnafil® T Clean, cleaner for soiled membrane surface</li> <li>- Sikaplan® WT Fixation Plate PP for fixing pieces</li> <li>- Sikaplan® W Flat Profile Stainless Steel for fixing pieces</li> <li>- Sarnafil® T Prep, cleaner for membrane surface preparation prior to welding</li> </ul>
<b>Application Details</b>	
<b>Substrate Quality</b>	<p>Concrete (new or existing), old linings and completely cured pool coatings: Clean, no ponding water, homogeneous, free from oil and grease, dust and loose, friable particles. Paint, cement laitance and other poorly adhering materials must be removed.</p> <p>Soil: The excavated soil, or dam fill must be compacted to Proctor value min. 95%. Broken aggregates, crushed stones and roots on soil surface must be removed. To allow adequate dewatering under the waterproofing membrane, the soil must be sloped to <math>\geq 4\%</math> and must be covered with a filter layer of fine gravel (dia. <math>\leq 4\text{mm}</math> / thickness 5cm). A cushion layer of (non woven fabric) geotextile with min. density of <math>500\text{g/m}^2</math> must then be laid on top of prepared substrate, prior to membrane installation.</p>
<b>Application Conditions / Limits</b>	
<b>Substrate Temperature</b>	0°C min. / +35°C max.
<b>Ambient Air Temperature</b>	+5°C min. / +35°C max.
<b>Ambient max. Temperature of Liquids</b>	+35°C (water)
<b>Application Instructions</b>	
<b>Application Method / Tools</b>	<p>Installation method: Heat welding on installed sheet waterproofing membranes at details.</p> <p>All membrane overlaps must be welded by using hand welding guns and pressure rollers or automatic heat welding machines, with individually adjustable and electronically controlled welding temperatures (such as the manual Leister Triac PID / automatic: Leister Twinny S / semi-automatic: Leister Triac Drive).</p> <p>Welding parameters, such as speed and temperature must be established with trials on site, prior to any welding works.</p> <p>Sarnafil® T Prep must be used for seam preparation and cleaning of slightly soiled membrane surfaces.</p> <p>Sarnafil® T Clean must be used for seam cleaning of soiled membrane surfaces.</p>
<b>Notes on Application / Limits</b>	<p>This product must only be used by Sika approved contractors with experience in lining of pits and ponds.</p> <p>Sikaplan® WT 5300-13C membrane is not suitable for the use as liner in pools and canals when exposed to permanent water temperature exceeding + 35°C.</p> <p>The membrane colour might change under permanent influence of UV-light within and above area of permanent water surface level.</p> <p>The watertightness of the structure must be tested and approved after completion of the membrane installation works according to the requirements of the client's specifications.</p>
<b>Value Base</b>	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.
<b>Local Restrictions</b>	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.
<b>Health and Safety Information</b>	This product is an article within the meaning of Article 3.3 of Regulation (EC) No. 1907/2006. A safety data sheet following EC- Regulation 1907/2006, article 31 is not needed to bring the product to the market to transport or use it. The product does not damage the environment when used as specified.

<b>REACH</b>	<p><b>European Community Regulation on chemicals and their safe use (REACH: EC 1907/2006)</b></p> <p>This product is an article within the meaning 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. Therefore, there are no registration requirements for substances in articles within the meaning of Article 7.1 of the Regulation.</p> <p>Based on our current knowledge, this product does not contain SVHC (substances of very high concern) from the candidate list published by the European Chemicals Agency in concentrations above 0.1 % (w/w).</p>
<b>Protective Measures</b>	Fresh air ventilation must be ensured, when working (welding) in closed rooms. Local safety regulations must be observed.
<b>Transportation Class</b>	The product is not classified as hazardous good for transport.
<b>Disposal</b>	The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.
<b>Legal Notes</b>	<p>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.</p>



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