

# Pond liner FATRAFOL P 923

TL 5-1025-11

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## Product description

FATRAFOL P 923 is a non reinforced pond liner on a basis of thermoplastics polyolefines, T - type according to the EN 13967.

FATRAFOL P 923 membrane is resistant to growing through with plant roots and microbes; it is stable to weathering influences including UV radiation; it has a very good chemical resistance to all waters occurring in the nature without difference of minerals and natural substances being dissolved in them.

FATRAFOL P 923 is produced by extrusion.

## Usage

FATRAFOL P 923 membrane is identified for waterproofing of ponds and water areas (garden ponds, swimming reservoirs, fire reservoirs, lake waterproofing, etc.). The individual membrane bands are welded in various possible demanded dimensions and forms as well.

FATRAFOL P 923 membrane is not suitable for providing the closed pressure insulations. FATRAFOL P 923 membrane hinders perfect to water losses by leakage, it is of height flexibility also under low temperatures.

FATRATEX geotextile is laid under pond liner due to protect it from a risk of braking-through with a bottom stratum.

## Application

Jointing and laying of the pond liner can be made under the temperature till up to 0 °C; the pond liner application is recommended to make under the temperature till up to +10 °C. Pond liner can be mutual jointed by hot air welding or heat key, devices with temperature regulation. Pond liner overlap at jointing must be at least 50 mm in all cases.

Temperature and welding speed settings must go out from the trials being provided directly under given conditions at the installation. Due to providing a perfect joint there is not necessary to treat the pond liner by solvents.

Due to keeping a long-term functionality of waterproofing coat there is recommended to protect the liner from mechanical damage and weathering influences. It should be made by a suitable protective material (e.g. synthetic geologic textile being loaded with concrete prefabricated elements, etc.).

## Warranties

Warranties for the trouble-free waterproofing function of coating insulation are subject to the waterproofing providing by specialized firms having a theoretical know-how and practical experiences of working with TPO pond liners. Warranties do not relate to the functionality losses of waterproofing coat in case of unprofessional material instalment or pond liner mechanical damage caused by rough handling, aquatics or by outside fault.

**Product data**

FATRAFOL P 923 fulfils the requirements of the Standard EN 13967.

Dimensions:

Thickness [mm] (ČSN EN 1849-2)	Width [mm] (ČSN EN 1848-2)	Length [m] (ČSN EN 1848-2)	Quantity [m <sup>2</sup> ]
1.00 ± 0.10	2000 (-10; +20)	30 (-0; +1,5)	60
1.50 ± 0.15	2000 (-10; +20)	20 (-0; +1,0)	40

Colour:

FATRAFOL P 923 is produced in colour of green - RAL 6005.

Packing, transport, storage:

FATRAFOL P 923 is packed into the rolls, which are laid on the wood pallets and fixed by a packing film. FATRAFOL P 923 must be transported in covered transporting means and stored in original closed packing. The recommended storage temperature is from -5 °C to +30 °C. There is necessary to protect the product from pollution at the building site. There is recommended to protect it from weathering influences till the processing time.

Technical parameters:

Characteristic	Test standard	Values of individual product thicknesses	
		1.00 mm	1.50 mm
Visible defects	EN 1850-2	meets	meets
Straightness	EN 1848-2	≤ 50 mm	≤ 50 mm
Tensile strength	MD EN 12311-2 CD method A	≥ 600 N/50 mm	≥ 850 N/50 mm
		≥ 600 N/50 mm	≥ 850 N/50 mm
Elongation at break	MD CD	≥ 700 %	≥ 700 %
		≥ 700 %	≥ 700 %
Tear resistance	MD EN 12310-1 CD	≥ 350 N	≥ 500 N
		≥ 350 N	≥ 500 N
Foldability at low temperature	EN 495-5	≤ -40 °C	≤ -40 °C
Joint strength	MD EN 12317-2 CD	≥ 400 N/50 mm	≥ 600 N/50 mm
		≥ 400 N/50 mm	≥ 600 N/50 mm
Water tightness to liquid water, 60 kPa	EN 1928 method B	meets	meets
Durability of watertightness againg artificial ageing, 60 kPa	EN 1296 EN 1928	meets	meets
Durability of watertightness againg chemicals, 60 kPa (Ca (OH) <sub>2</sub> ; 10% NaCl)	EN 1847 EN 1928	meets	meets
Resistance to static load	EN 12730 method B	meets 20 kg	meets 20 kg
Reaction to fire	EN 13501-1	Class E	Class E
Resistance to impact	EN 12691 method A	meets 500 mm	meets 750 mm
	EN 12691 method B	meets 2000 mm	meets 2000 mm
Water vapour properties - factor μ	EN 1931	220000 ± 30000	220000 ± 30000
Resistance to roots	CEN/TS 14416	meets	meets
Mass per unit area - informative value	EN 1849-2	0.90 kg/m <sup>2</sup>	1.35 kg/m <sup>2</sup>

MD - Machine Direction, CD - Cross Direction

**Safety regulation****Scrap disposal**

FATRAFOL P 923 must be disposed conformable with valid legal regulations. The clear scrap can be recycled, scrap not suitable for recycling you can depony. Waste, polluted by dangerous substances, is necessary to dispose by burning in the incinerator of dangerous wastes.

**Safety at work and health protection**

There is necessary to keep all safety, hygienic and fire regulations valid in the time of laying and pond liner joining.

**Related documentation**

- Construction and technological instruction of the FATRAFOL-H waterproofing system
- Certificate of production control system no. 1390-CPD-0019/11/Z of pond liner FATRAFOL P 923 according to Standard ČSN EN 13967:2005 emitted by CSI, a. s., Prague, workstation Zlín

**Producer**

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