

PTFE Filter Membrane Technical Information

< SAVILLEX TECHNICAL BRIEF >

Savillex PTFE filter membranes can be used to filter both gases and liquids. They have a very wide working temperature range (up to 260°C) and are inert to virtually every chemical. They are supplied as unlaminated, plain PTFE membranes without support rings. PTFE is hydrophobic, so the membranes must be pre-wetted with ethanol or methanol before the filtration of aqueous media.

Savillex PTFE 0.2 Micron and 0.45 Micron Filter Membranes

Pore Size (uM)	Thickness (uM)	Bubble Point With Isopropyl Alcohol (bar), Visual	Isopropanol Flow Rate (mL/min/cm ² /bar)
0.2	60	≥1.2	9
0.45	80	≥0.9	20

Savillex PTFE 1-2 Micron and 5-6 Micron Filter Membranes

Pore Size (uM)	Thickness (mm)	Air Flow - 100cc/1.0in ² / 20oz (seconds)	Bubble Point - Ethanol (kPa)	Water Flow Rate @13.5psi (mL/min/cm ²)	Water Initiation Pressure (psi)	Pore Volume (%)	Breaking Strength (N/mm width)
1-2	0.254 +/- 0.051	5-6	8.2 +/- 1.4	100 +/- 20	6 +/- 0.5	40	2.1
5-6	0.101 +/- 0.025	1.7 +/- 0.8	4.1 +/- 1.4	300 +/- 60	2 +/- 0.5	55	0.8

Note that that all Savillex filters are “nominal” rated and not “absolute” rated. A brief definition of the two types of filters can be found below.

An **absolute** pore size rating specifies the pore size at which a particulate of a specific size will be retained with 100% efficiency under strictly defined test conditions. Among the conditions that must be specified are: particle size, challenge pressure, concentration, and detection method used to identify the contaminant.

A **nominal** pore size rating describes the ability of the filter media to retain the majority of particulate at (60 - 98%) of the rated pore size. Process conditions such as operating pressure, concentration of particulates, etc., have a significant effect on the retention efficiency of the filters.

For more information on Savillex PTFE Filter Membranes, please email us at info@savillex.com or call us at +1 952-935-4100. You can also [click here](#) to browse our product offerings and shop online.



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