

# 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 (µM)	Thickness (µM)	Bubble Point With Isopropyl Alcohol (bar), Visual	Isopropanol Flow Rate (mL/min/cm <sup>2</sup> /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 (µM)	Thickness (mm)	Air Flow - 100cc/1.0in <sup>2</sup> /20oz (seconds)	Bubble Point - Ethanol (kPa)	Water Flow Rate @13.5psi (mL/min/cm <sup>2</sup> )	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](mailto: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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