

PTFE SYRINGE FILTERS

Recommended for HPLC and GC samples, sterilisation and clarification of most solvents and filtration of gases and air for venting.

- Incorporated PTFE (polytetrafluorethylene) membrane fixed without adhesive to a polypropylene housing.
- Hydrophobic.
- Very high flow rate.
- High chemical resistance to most solvents and acids.
- Free from wetting agents.
- They must be pre-wetted with a solvent such as ethanol or isopropanol before filtering aqueous samples.
- The filter diameter is related to the volume to be filtered:
 - <1 ml – 4 mm
 - <5 ml – 15 mm
 - <100 ml – 25 mm
- Pore sizes 0.20 µm and 0.45 µm.
- Sterilization by autoclaving at 121 °C or ethylene oxide.

TECHNICAL SPECIFICATIONS

Material filter	Polypropylene-reinforced PTFE				
Material housing	Polypropylene				
Pore size (µm)	0.2		0.45		
Filter diameter (mm)	15	25	4	15	25
Housing diameter (mm)	25	33	12	25	33
Flow rate ⁽¹⁾ (ml/min)	20	45	2	70	130
Flow rate ⁽²⁾ (ml/min)	55	160	4.5	150	260
Flow rate ⁽³⁾ (ml/min)	0.5	1.2	0.06	1.1	1.8
Bubble point ⁽⁴⁾ (bar)	1.4	1.4	0.9	0.9	0.9
Filter area (cm ²)	1.7	4.8	0.07	1.7	4.8
Hold up volume (ml) (before/after bubble point)	0.23 / 0.1	0.35 / 0.2	- / 0.005	0.23 / 0.1	0.35 / 0.2
Adsorption ⁽⁵⁾	8 µg/cm ² with gamma globulin				
Connectors	Female luer lock inlet Male luer slip outlet				
Max. operational pressure (bar)	4.5	4.5	4.5	4.5	4.5
Burst pressure (bar)	6	6	6	6	6
Max. temperature (°C)	121	121	121	121	121

⁽¹⁾ Flow rate for ethanol at Δp = 1 bar (100 kPa, 14.5 psi)
⁽²⁾ Flow rate for methanol at Δp = 1 bar (100 kPa, 14.5 psi)
⁽³⁾ Flow rate for air at Δp = 1 bar (100 kPa, 14.5 psi)
⁽⁴⁾ Wetting fluid: Isopropanol
⁽⁵⁾ For pore size 0.2 µm

APPLICATIONS

- Sterilization and clarification of most acidic and aggressive solvents.
- Degassing solvents.
- Venting of containers, and sterile air, gas and aerosol applications.
- Protection within vacuum pump.
- Cleaning of small volume samples for HPLC and GC applications, which require greater chemical resistance than regenerated cellulose syringes (JCR).
- Excellent for sterilization and clarification of most solvents (such as acetone, dimethyl formamide or DMSO), and of very aggressive or acidic solutions.
- Filtration and degassing of solvents before being analysed and venting of sterile containers.

ORDERING INFORMATION

Ø	Units	Pore	0.20 µm	0.45 µm
4 mm	50		-	JPT045450
15 mm	100		JPT02015100	JPT04515100
	500		JPT02015500	JPT04515500
25 mm	100		JPT02025100	JPT04525100
	500		JPT02025500	JPT04525500

