

# 3.1 Syringe Filters

### A. Hydrophilic Polytetrafluoroethylene (PTFE)

Hydrophilic PTFE membranes are unsupported membrane that ideal for HPLC and mixtures of aqueous and organic solvents. Use with both aqueous and organic solvents, along with their mixtures.

### B. Polyvinylidene Difluoride (PVDF)

Hydrophobic membrane. Fast flow rate and very low protein binding. Generally compatible with most common solvents. Ideal for protein recovery applications.

#### C. Nylon

Pure hydrophilic membrane with very low levels of extractable - it is mechanically very strong and can be used in many different applications. The Nylon filter membrane undergoes extensive testing before it is encapsulated to ensure that the level of extractable is unsurpassed.

## D. Mixed Cellulose Esters (MCE)

Hydrophilic MCE membranes. Biologically inert mixture of Cellulose Acetate and Cellulose Nitrate membranes, which have higher protein binding than CA for most proteins. High porosity provides high flow rate. Good use for aqueous based samples

#### **Specification**

0.1μm	0.22μm	0.45μm	0.65µm	>1.0µm
Mycoplasmas	UHPLC	HPLC	Yeasts	Large Particulates
Colloids	Bacteria	Particulates	Particulates	
Small Particulates	Small Particulates			

Process Volume	1-10ml	10-60ml	10-80ml	10-100ml
Syringe Filter	13mm	20mm	25mm	33mm
Diameter	-	-	-	



Filter Media	NYLON/PTFE/PVDF/MCE				
Pore Size, μm	0.22μm, 0.45μm, 0.65μm, 0.8μm				
Diameter	13mm	25mm	33mm	50mm	
Housing	PP	PP	PP	PP	
Filtration Area	1.3cm <sup>2</sup>	4.9 cm <sup>2</sup>	8.5 cm <sup>2</sup>	19.8cm²	
Maximum Operating Pressure	5.2bar	5.2bar	5.2bar	5.2bar	
Process Volume	10ml	100ml	200ml	5000ml	
Hold-up Volume	< 50ul	<100ul	<200ul	<350ul	
Temperature	Maximum Operating Temperature 131°C				
Sterilization	Autoclave at 121°C at 1 bar for 20 Minutes/EO/Gamma				