

mdi PVDF syringe filter incorporate a hydrophilic PVDF membrane filter in a polypropylene housing. These syringe filters are used for filtration and sterilization of protein solutions, culture media and buffers.

These filters are validated to provide absolute retention, very low hold up volumes and low protein binding while offering excellent throughputs.

Special Features

- Absolute retention efficiency
- 16 Channels for minimum back pressure
- Low protein binding
- Hydrophilic
- Validated for bacterial retention as per ASTM F838-05

Applications

- Sterilization of high value additives such as hormones, vitamins and antibiotics
- Sterilization of protein solutions, culture media and buffers
- Sterilization of purified DNA



Specifications

Materials of Construction

Housing	Polypropylene
Filter Media	PVDF Membrane

Pore Size

0.2 µm, 0.45 µm

Bubble Point

0.2 µm	≥ 50 psi (≥ 3.52 Kg/cm ²)
0.45 µm	≥ 30 psi (≥ 2.11 Kg/cm ²)

Inlet/Outlet Connections

Inlet: Female luer-lock

Outlet: Male luer slip

Typical Hold-up Volume(with air purge)

4mm	13mm	25mm
<5µl	<20µl	<50µl

Sterilization Compatibility

EO Sterilizable	Yes
Gamma Sterilizable	Yes

Burst Pressure (13mm/25mm)

>14kg/cm²

Maximum Operating Temperature

55 °C

Retention Efficiency

0.2 µm	LRV >10 ⁷ <i>B. diminuta</i> (ATCC 19146) per cm ² of filter area
0.45 µm	LRV >10 ⁷ <i>S. marcescens</i> (ATCC 14756) per cm ² of filter area

Maximum Operating Pressure

75 psi @ 25° C

Recommended Sample Volume

4mm	13mm	25mm
< 1 ml	< 10 ml	< 100 ml

Biosafety

Passes the Biological Reactivity Tests, *In Vivo* for Class VI plastics as described in USP <88>.

Cytotoxicity

Passes the Biological Reactivity Tests, *In Vitro* for Cytotoxicity as described in USP <87>.

Fiber Release

Complies with USFDA CFR Title 21, Part 210.3(b)(6) and do not requires any initial Flushing

Particle Release

The filtrate complies with USP <788> test for particulate matter in injections

Indirect Food Additives

The plastic housing material complies with the requirements of USFDA CFR Title 21 Part 177.1520

Oxidizable Matter

Passes test as per USP <1231>



Packaging

Standard Pack:

Pre-sterilized PVDF membrane syringe filters are individually packed in blister packs with peel off. The integrity of package has been validated as per ASTM F 1929 - 98.



These individually packed filters are packed in boxes of 100 each specially designed for easy front access.

Storage

It is recommended to keep the syringe filters:

- i. at clean and dry location
- ii. away from direct heat sources at temperature below 50°C

Ordering Information

Type	Code	Size		Pore Size		Inlet/Outlet		XX	Sterility		Pack Size	
		Diameter	Code		Code		Code			Code	Qty	Code
Pre-sterilized Polyvinylidene fluoride membrane syringe filter	SYVF	4mm	01	0.2µm	01	Female Luer Lock	M		EO Sterile	2	100	04
		13mm	03	0.45µm	02	Male Luer Slip	N		Gamma Sterile	3		
		25mm	06									
Example:												
SYVF	06		01			MN	XX		2			04