

**mdi** AseptiCap WS are low protein binding hydrophilic PVDF membrane capsule filters offering serial filtration incorporating a large pore size upstream membrane to protect the downstream membrane for enhanced throughput.

These capsule filters are validated to meet compendia and regulatory requirements and are well characterized. They meet key process requirements such as absolute retention efficiency, extremely low extractables, high throughputs, wide chemical compatibility and other important characteristics.

### Key features

- Absolute retention
- 100% integrity tested
- Low protein binding
- Low extractables
- Low hold up volume

### Applications

- Cell culture media
- Growth regulators
- Small volume parenterals

Complies with USFDA 21 CFR 210.3(b)(6)

Meets and Exceeds USFDA 21 CFR 177.1520



### Specifications

#### Pore Size

0.1 µm

#### Materials of Construction

Membrane	Hydrophilic PVDF
Support Layer	Polyester
Plastic Components	Polypropylene

#### Microbial Retention

LRV >7 for *A. laidlawii* (ATCC 23206) per cm<sup>2</sup>

#### Maximum Operating Temperature

80°C @ ≤ 30 psi (2 Kg/cm<sup>2</sup>)

#### Maximum Differential Pressure

60 psi (4 Kg/cm<sup>2</sup>) @ 30°C

#### Bubble Point

≥31psi (2.18 Kg/cm<sup>2</sup>) with 50% IPA/ water solution

### Sterilization

**By Autoclave:** Autoclavable at 125°C for 30 minutes, 2 cycles. Can not be in-line steam sterilized

**By Gas:** Sterilization by Ethylene Oxide

### Toxicity

Passes Bioreactivity test, In Vivo, as per USP <88> for Class VI plastics

### Cytotoxicity

Passes Biological Reactivity Tests, In Vitro, USP <87> for cytotoxicity

### Bacterial Endotoxin

Aqueous extracts exhibit < 0.25 EU/ml as established by Limulus Amebocyte Lysate (LAL) Test as per USP <85>

### Fiber Release

Passes test as per USP and comply with USFDA 21 CFR Part 210.3(b)(6) for fiber release

### Particle Release:

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

### TOC and Conductivity

Meets the WFI requirements of USP for TOC <643> and Conductivity <645> after flushing with a specified volume of WFI

### Extractables with WFI

Passes test as per USP <661>

### Oxidizable Substances

Passes test as per USP <1231>

### Ordering Information

Type	Size		Pore Size		Inlet /Outlet		X	Inline/T-Line		Sterility		Pack Size		
	Code	Length and EFA	Code	Code	Code	Code		Code	Code	Code	Code	Code		
AseptiCap WS (0.2 µm upstream)	LWS1	5" (3000 cm <sup>2</sup> )	53	0.1 µm	36	1½" Sanitary Flange	E	X	Inline	X	Non-Sterile	1	1	01
		10" (6000 cm <sup>2</sup> )	54			Single Step ½" Hose Barb	Q		T-Line*	T	EO Sterile	2		
AseptiCap WS (0.45 µm upstream)	LWSX	20" (12000 cm <sup>2</sup> )	55			¾" Sanitary Flange***	S		*T-line Capsule Filter are available with 1½" Sanitary Flange I/O Connections only					
		30" (18000 cm <sup>2</sup> )	56			⅝" Hose Barb	I	**1" Hose Barb connection is not available in 5" capsule filters						
						1" Hose Barb**	Z	***¾" Sanitary Flange is available only in 5" and 10" capsule filters						

EFA: Effective Filtration Area

Note: Size 5" is available in Inline Capsule filters only

Example

LWS1	56	36	QQ	X	X	1	01
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