

mdi Polyethersulfone (PES) membrane cartridge filters type *AseptiSure HSR* are high temperature resistant filtration devices. These are designed to withstand high pressure differential at high steam sterilization temperature upto 135°C. These filters exhibit high mechanical stability, and wide chemical compatibility even with alkaline process fluids.

These filters come with Polyethersulfone membrane serial layers and Polypropylene support layers to offer 1-14 pH compatibility.

mdi *AseptiSure HSR* cartridge filters are validated for key performance parameters such as retention efficiency, chemical compatibility, extractables, heat stability and flow rates.

Special Features

- Low protein binding
- Non-toxic material of construction
- Multiple Autoclave
- Long service life
- Heat sealed, no glues or adhesives
- Each filter comes with an individual certificate of quality
- Total Traceability:
Unique identification number is laser etched on each filter

Application

- Sterile filtration of culture media for mammalian cell culture

Microbially Validated as per ASTM F 838-05

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

Meets and Exceeds USFDA 21 CFR 177.1520



Material of Construction

Core and Sleeve : Polypropylene

Filter Membrane : Hydrophilic PES

Support Layers : Polypropylene

Integrity Test Data

Bubble Point (50% IPA/Water Wetted)	≥ 31 psi (2.18 Kg/cm ²)
Air Diffusion Flow 5" Cartridge (Water Wetted)	≤ 15 ml/min @ 50 psi (3.51 kg/cm ²)
Air Diffusion Flow 10" Cartridge (Water Wetted)	≤ 29 ml/min @ 50 psi (3.51 kg/cm ²)

Water Flow Rate (Typical) for 10" Cartridge Filters

Pore Size	Flow Rate
0.1µm	15 lpm @ 0.70 kg/cm ² @ 27° C

Specification

Pore Size Rating

0.1 µm

Microbial Retention

LRV>7 for *Acholeplasma laidlawii* (ATCC 23206) per cm²

Sterilization

- 25 Autoclave/In-line steam sterilization cycles at 135°C for 30 min., Δp=5 psi (0.3kg/cm²)

Maximum Differential Pressure

50 psi (3.5Kg/cm²) @ 25 °C

Maximum Operating Temperature

80 °C @ ≤ 30psi (2Kg/cm²)

Reverse Pressure

≤ 10 psi (0.7Kg/cm²) @ 25 °C

Biosafety

- Passes the Biological Reactivity tests for Class VI plastics as per USP <88>
- Passes the Biological Reactivity Tests, In Vitro for Cytotoxicity as described in USP <87>

Oxidizable Matter

Passes test as per USP <1231>

Fiber Release

Complies with USFDA CFR Title 21, 210.3(b)(6).

Particle Release

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

TOC (Total Organic Carbon)

Meets the WFI requirements of USP <643> for Total Organic Carbon after a 3 liter WFI flush.

Conductivity

Meets the WFI requirements of USP <645> for Conductivity after a 3 liter WFI flush.

Ordering Information

Type	Size		Pore Size		Adapter		Elastomer		Sterility		Pack Size	
	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	
<i>AseptiSure HSR</i> (0.2µm Upstream)	CHR1	5"	53	0.1 µm	36	7P	A0	Silicone	SS	Non Sterile	1	1 01
		10"	54			'O'	D0	Viton	SV			
	CHRX	20"	55			7P without Fin	A1	EPDM	SE			
30"		56	28 with Fin	C0	FEP Encapsulated Viton	FV**						
<p>*Size 5" is available in Adaptor Code A0 (7P) and A1 (7P without fin) only *FV is available in Adaptor Code A0 (7P) and A1 (7P without fin) only</p>												
EXAMPLE	CHRX	55		36		A0		SS		1		01

DSTCHR36X1728F