

Certificate of Quality

The PVDF Membrane Cartridge Filters have been manufactured in a **mdi** facility in compliance with **ISO 9001** regulations using *validated production processes*.

AseptiSure WS PVDF Membrane Cartridge Filter

Catalog No. : CWHX5301J0SS101

Type : CPWS

Pore Size : 0.2 μm (0.45 μm + 0.2 μm)
Lot Number : CV8819H SI.No. 003

SPECIFICATION

Length	5"
Filter Media	Hydrophilic PVDF Membrane
Drainage Layers	Polyester
Plastic Components	Polypropylene
Differential Pressure	< 3.5 Kg/cm² (3.43 Bar) at 25 °C
Maximum operating Temperature	80 °C at < 2 Kg/cm² (1.96 Bar)
Reverse Pressure	< 0.7 Kg/cm² (0.69 Bar) at 25 °C
Sterilization	By Autoclaving or Steam-in-place (SIP)

LOT RELEASE CRITERIA

100% Integrity Tested : The cartridge filter has been tested for integrity by Air Diffusion Flow test and Bubble

Point test using DI water.

Diffusion flows with DI water were: ≤ 15 ml/min @ 2.60 kg/cm² (2.55 Bar)

Bubble point value with DI water was: ≥ 50 psi (3.45 Bar)

The cartridge filter is also certified for integrity by Bubble point test using 50%

IPA/Water solution.

Bubble point with 50% IPA/Water solution is ≥ 16 psi (1.10 Bar)

Water Flow Rate : ≥ 12 lpm @ 0.70 Kg/cm² (0.69 Bar) @ 27 °C

Microbial Challenge Test : Retains ≥ 10⁷ organisms/cm² of *B. diminuta* ATCC 19146 challenge as per ASTM

F838-05 methodology.

VALIDATED FOR

Heat Stability : Maintains integrity after one Steam sterilization cycle at 135 °C for 30 minutes each.

Extractable: Within limits as specified in USP.

Oxidizable matter : Passes test as per USP.

Bacterial Endotoxin : Filtrate meets the USP requirements for Sterile WFI of ≤ 0.25 EU/mI as determined

by Limulus Amebocyte Lysate (LAL) test.

Biosafety : Passes Biological Reactivity Tests, In Vivo for Class VI plastic as described in

USP <88>.

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

Indirect Food Additives : Passes as per FDA 21CFR 177.1520(a)1(i).

Particle Release : Passes test as per USP <788>, "Particulate matter in Injections".

Fiber Release : Complies with FDA 21CFR 210.3(b)(6).

CUSTOMER SUPPORT

mdi offers its unique interdisciplinary skills to provide solutions to specific problems. Please contact our factory or the local application specialist.

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Head of Quality Assurance

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