

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. : CWHX5436A0SS101
 Type : CPWS
 Pore Size : 0.1 µm (0.45 µm + 0.1 µm)
 Lot Number : CV9904A SI.No. 142
 Manufacturing Date : 2024 - 01
 Expiry Date : 2029 - 01

SPECIFICATION

Length	10"
Filter Media	Hydrophilic PVDF Membrane
Drainage Layers	Polyester
Plastic Components	Polypropylene
Differential Pressure	< 3.5 Kg/cm ² (3.43 Bar) at 25 °C
Maximum operating Temperature	80 °C at < 2 Kg/cm ² (1.96 Bar)
Reverse Pressure	< 0.7 Kg/cm ² (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 using purified water and Bubble Point Test using 50% IPA/Water solution.
 Diffusion flows were: ≤ 30 ml/min @ 3.52 kg/cm² (3.45 Bar)
 Bubble point was: ≥ 31 psi (2.14 Bar)

Typical Water Flow Rate

: 13 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 3 Steam sterilization cycles 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/ml 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).

Total Organic Carbon

: Meets USP <643> limit of 500 ppb for total organic carbon after flushing specified volume of water for injection.

Conductivity

: Meets USP <645> limit of 1.3 µS/cm at 25 °C for water conductivity after flushing specified volume of water for injection.

CUSTOMER SUPPORT

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

T. No.: COQ/CAR/010-02



Head of Quality Assurance

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