

# 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. : CWHX5401A0SS101  
 Type : CPWS  
 Pore Size : 0.2 µm (0.45 µm + 0.2 µm)  
 Lot Number : CV8859H      SI.No. 005

### SPECIFICATION

<b>Length</b>	10"
<b>Filter Media</b>	Hydrophilic PVDF Membrane
<b>Drainage Layers</b>	Polyester
<b>Plastic Components</b>	Polypropylene
<b>Differential Pressure</b>	< 3.5 Kg/cm <sup>2</sup> (3.43 Bar) at 25 °C
<b>Maximum operating Temperature</b>	80 °C at < 2 Kg/cm <sup>2</sup> (1.96 Bar)
<b>Reverse Pressure</b>	< 0.7 Kg/cm <sup>2</sup> (0.69 Bar) at 25 °C
<b>Sterilization</b>	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: ≤ 30 ml/min @ 2.60 kg/cm<sup>2</sup> (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** : ≥ 30 lpm @ 0.70 Kg/cm<sup>2</sup> (0.69 Bar) @ 27 °C

**Microbial Challenge Test** : Retains ≥ 10<sup>7</sup> organisms/cm<sup>2</sup> 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/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).

### CUSTOMER SUPPORT

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



Head of Quality Assurance

Issue Date: 08-Aug-19

### **Advanced Microdevices Pvt. Ltd.**

21, Industrial Area, Ambala Cantt, INDIA,

Tel: +91-171-2699290/ 2699274

Website: www.mdimembrane.com

Email: info@mdimembrane.com

**An ISO 9001 Company**