

Certificate of Quality

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

AseptiCap WS Hydrophilic PVDF Membrane Capsule Filters

Catalog No. : DWS15336DDXX101

Type : DWS

Pore Size : $0.1 \mu m (0.2 \mu m + 0.1 \mu m)$ Lot Number : DV5984L SI.No. 234

Manufacturing Date : 2024 - 12 Expiry Date : 2029 - 12

SPECIFICATION

Length	5"
Filter Media	Hydrophilic PVDF Membrane
Drainage Layers	Polyester
Housing	Polypropylene
Differential Pressure	< 4Kg/cm² at 30 °C
Maximum Operating Temperature	80 °C @ < 2 Kg/cm²
Sterilization	2 Autoclaving cycles at 125 °C of 30 minutes each

LOT RELEASE CRITERIA

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

Point Test using purified water.

Diffusion flows were: ≤ 8.0 ml/min @ 3.52 kg/cm²

Bubble point was: \geq 70 psi (4.83 Bar).

Typical Water Flow Rate : 2.5 lpm @ 0.70 Kg/cm² @ 27 °C

Microbial Challenge Test : Retains ≥ 10⁷ organisms/cm² of *Acholeplasma laidlawii (*ATCC 23206).

VALIDATED FOR

Bubble point (50% IPA) : The filter is certified/validated for integrity by Bubble point test using 50%

IPA/Water solution. Bubble point ≥ 28 psi (1.93 Bar)

Autoclavability : Maintains integrity after 2 autoclaving cycles at 125 °C of 30 minutes each.

Bacterial Endotoxin : Aqueous extracts exhibit < 0.25 EU/ml as established by Limulus Amebocyte

Lysate (LAL) test as per USP <85>.

Extractable with WFI: Passes NVR test as per USP <661>.

Oxidizable substances: Passes test as per USP<1231>.

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 μ S/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/CAP/012-03

Om

Head of Quality Assurance

Issue Date: 16-Dec-24

Advanced Microdevices Pvt. Ltd.

Jawahargarh Road,

Village-Tepla, Ambala, INDIA. Tel: +91-171-2699290/2699274

Website: www.mdimembrane.com Email: info@mdimembrane.com

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