

Certificate of Quality

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

AseptiPrime KS PES Membrane Cartridge Filters

: CKH75301E0SS101 Catalog No.

Type : CK

Pore Size $: 0.2 \, \mu m \, (0.5 \, \mu m + 0.2 \, \mu m)$ Lot Number : CK6994L SI.No. 096

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

SPECIFICATION

Length	5"
Filter Media	Polyethersulfone Membrane
Drainage Layers	Polyester
Housing	Polypropylene
Differential Pressure	< 3.5 Kg/cm² at 25°C
Maximum Operating Temperature	80 °C at < 2 Kg/cm²
Reverse Pressure	< 0.7 Kg/cm² at 25°C
Sterilization	By Autoclaving or Steam-in-place (SIP)

LOT RELEASE CRITERIA

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

Point test using DI water.

Diffusion flow with DI water was: ≤ 15 ml/min @ 2.60 kg/cm² Bubble point value with DI water was: ≥ 50 psi (3.44 Bar)

Typical Water Flow Rate : 11 lpm @ 0.70 Kg/cm² @ 27 °C

: Retains $\geq 10^7$ organisms/cm² of *B. diminuta* ATCC 19146 challenge as per ASTM **Microbial Challenge Test**

F838 methodology.

VALIDATED FOR

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

IPA/Water solution. Bubble point ≥ 18 psi (1.24 Bar)

Heat Stability : Maintains integrity after 25 autoclave/Steam sterilization cycles at 135°C for 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 : Within limits as specified in USP.

Oxidizable matter : Passes test as per USP.

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

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.

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

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/004-04

Head of Quality Assurance

Issue Date: 17-Dec-24

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