

Certificate of Quality

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

AseptiCap KS-y PES Membrane Capsule Filters

: LKSX5601EERX101 Catalog No.

Type : LKS

Pore Size $: 0.2 \, \mu m \, (0.45 \, \mu m + 0.2 \, \mu m)$ Lot Number : LK5594L SI.No. 045

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

SPECIFICATION

Length	30"
Filter Media	Polyethersulfone Membrane
Drainage Layers	Polyester
Differential Pressure	< 4Kg/cm² at 30 °C
Housing	Polypropylene
Maximum Operating Temperature	80 °C @ < 2 Kg/cm ²
Sterilization	Can be sterilized by Gamma Irradiation upto 50 kGy

LOT RELEASE CRITERIA

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

Point test using DI water.

Diffusion flows with DI water were: ≤ 90 ml/min @ 2.60 kg/cm² Bubble point value with DI water was: ≥ 50 psi (3.44 Bar)

Typical Water Flow Rate : 80 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

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

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

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/CAP/002-05

Head of Quality Assurance Issue Date: 14-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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