mdi
Membrane Technologies

AseptiCap KSO-γ
Polyethersulfone Membrane Capsule Filters

Polyethersulfone Membrane Capsule Filters

mdi *AseptiCap KSO-γ are* gamma sterilizable polyethersulfone membrane capsule filters offering wide pH (1-14) compatibility. These filters are specially designed for alkaline fluid streams in bio-pharma manufacturing processes, with added advantage of high throughputs and low hold up volumes.

These capsule filters offer serial filtration incorporating a large pore size upstream membrane to protect the downstream membrane for enhanced throughputs.

AseptiCap KSO-γ are validated for use in pharmaceutical and bio-pharmaceutical applications.

Application

- Scale up of new drug delivery systems
- Bioburden removal from cell harvest supernatants
- Sterilization of bio-pharmaceuticals such as vaccines and therapeutic proteins
- Sterilization of oncology drugs
- Sterilization of buffers

Material of Construction

Housing : Polypropylene
Filter Media : Polyethersulfone Membrane
**Support Layer** : Polypropylene

Special Features

- Wide pH compatibility (1-14)
- Absolute retention
- Low protein binding
- Light weight and self supporting
- Low hold up volume
- Very high flow rates
- 100% Integrity tested
- Total traceability

Integrity Test Data

Water Wetted Bubble Point

Pore Size	psi	Kg/cm²
0.2 µm	≥ 50	3.52
0.45 µm	≥ 30	2.11

Typical Water Flow Rate : 0.2 µm Capsule Filter
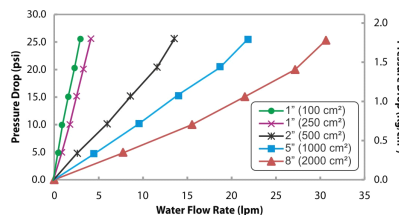
Specification

Maximum Differential Pressure
4 Kg/cm² @ 30 °C

Maximum Operating Temperature
80 °C @ ≤ 2 Kg/cm²

Sterilization By Irradiation
Gamma Irradiatable upto 50 kGy. These filters should not be autoclaved or in-line steam sterilized.

Bacterial Retention
0.2µm: LRV > 7 for *B. diminuta* ATCC 19146 per cm² of filter area
0.45µm: LRV > 7 for *S. marcescens* ATCC 14756 per cm² of filter area

Oxidizable Matter:
Passes test as per USP <1231>

Fiber Release:
Complies with USFDA CFR Title 21, 210.3 (b) (6)

Particle Release:
The filtrate complies with USP <788> test for particulate matter in injections

Biosafety:
Passes the Biological Reactivity tests for Class VI plastics as per USP <88>

TOC (Total Organic Carbon)
Meets the WFI requirements of USP <643> for Total Organic Carbon after flush with specified volume of WFI

Conductivity
Meets the WFI requirements of USP <645> for Conductivity after flush with specified volume of WFI

Ordering Information

Type		Size		Pore Size		Inlet/Outlet		Radiation Sterilizable		X	Sterility		Pack Size	
	Code	EFA	Code		Code		Code		Code			Code		Code
AseptiCap KSO-γ (0.45µm Upstream)	DKOX	1" 100 cm²	31	0.2µm	01	1/4" SHB	A	Yes	R		Non-Sterile	1	1	01
		250 cm²	51	0.45 µm*	02	1/2" Hose Barb	D	No*****	X					
AseptiCap KSO-γ (0.8µm Upstream)	DKO5	2" 500 cm²	52			1½ Sanitary Flange	E				Gamma Sterile	3		
		5" 1000 cm²	53			3/4" Sanitary Flange	S							
		8" 2000 cm²	57			Quick Connector	J							
						Single Step ½" Hose Barb**	Q							
						Female Luer Lock	U							
						Male Luer Slip***	W							
						3/16" Hose Barb****	N							
						3/8" Hose Barb**	I							

*0.45µm pore size is available with 0.8µm upstream only
**Single Step 1/2" Hose Barb and 3/8" Hose Barb end connections are not available 1" capsule filters
***Male Luer Slip end connections is available only in 1" capsule filter as outlet
****3/16" hose barb end connection is available in:
 - 1" and 2" capsule filters as inlet and outlet
 - 5" as outlet only
*****Gamma Sterile Capsule Filters cannot be gamma irradiated again

Example:

	DKOX	52	01	EE	R	X	1	01

DST DKOXRXX1531L

Data Sheet