STERYFLON Plus ADM FREE MINI CARTRIDGES

- Materials free from substances of animal origin (ADM FREE - ANIMAL DERIVED MATERIALS)
- Intrinsecally Hydrophobic PTFE membrane
- High permeability versus gas
- Thermic cycles resistant
- Repeatedly steamable in situ or in autoclave
- Thermowelded construction
- Materials suitable for food contact according to EU and FDA requirements
- Bio-Safety per USP-Plastics
- Validation Guide available on request



STERYFLON Plus ADM FREE mini cartridges are "animal free" as the materials used for their manufacturing are free from animal derived substances. They are an important advance in membrane filter cartridge technology. These mini cartridges are specifically designed for sterile filtration of compressed air and gas in pharmaceutical, bioengineering and food & beverage applications, and also for filtering high purity solvents in microelectronics. The filter media is a hydrophobic expanded PTFE with liquid absolute filtration rating of 0.1 and 0.2 micron, pleated with upstream and downstream support layers in polypropylene nonwoven. As they are free from animal derived substances Steryflon Plus ADM FREE mini cartridges are suitable for the newest and even more increasing market requirements.
STERYFLON Plus mini cartridge is manufactured within a controlled environment and each cartridge is integrity tested and validated for bacterial retention correlated with microbiological challenge test.
The retention is checked on regular sampling.

MATERIALS OF CONSTRUCTION

Filter media	PTFE hydrophobic membrane
Upstream supports	polypropylene
Downstream supports	polypropylene
Internal Core	polypropylene
External Cage	polypropylene
End caps/Adapters	polypropylene

FOOD-SAFETY

STERYFLON Plus mini ADM FREE filter element materials meet (EU) regulation 10/2011 and its amendments, regulations (EC) 1935/2004 and 1895/2005.

BIO-SAFETY

Filter media and components pass USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics.
Specific for "PH" and "PHH" grade: the filter meets USP "Water for injection" requirements for particle release and the effluent is Non-Pyrogenic per USP Bacterial Endotoxins (< 0,25 EU/ml).
Bacterial endotoxins are determined by LAL test.

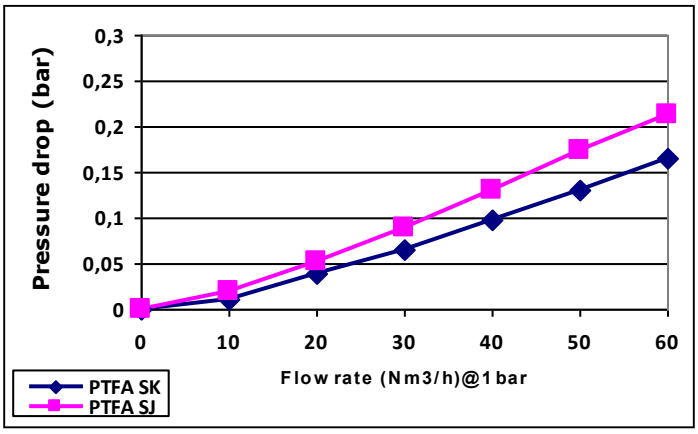
OPERATING CONDITIONS

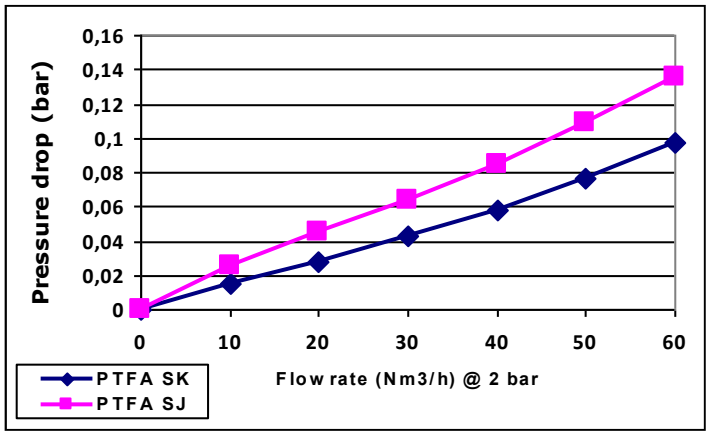
- max. continuous temperature in air	65 °C
- max. cumulative time of steam sterilization	150 hours at 140 °C with cycles of 30 minutes
- sanitization with chemicals	can be sanitized by standard chemical agents
- max. differential pressure	5,0 bar at 25 °C
- recommended change out differential pressure	2,0 bar at 25 °C

CODE	ABSOLUTE FILTRATION RATING		3) BACTERIAL RETENTION $>10^7$ CFU/cm^2	ACCEPTABLE LIMIT FOR INTEGRITY TEST
	IN LIQUID	IN DRY GAS		
SJ	0,1 µm	< 0,01 µm	Acheleoplasma laidlawii in liquid	1) ≤ 13 ml/min @ 1,0 bar
SK	0,2 µm	< 0,01 µm	B. Diminuta in liquid / Batteriofago T1 in aerosol	1) ≤ 6 ml/min @ 0,8 bar
SKA	0,2 µm	< 0,01 µm	Brevundimonas diminuta in liquid	2) ≤ 8 Nml/10min @ 2,5 bar

Note:
1– The integrity is verified by DIFFUSION TEST using an aqueous solution of isopropyl alcohol (IPA 60/40 V/V) as wetting liquid.
2– The integrity is verified by WATER FLOW INTRUSION TEST.
3– Cartridges are validated for retention of the microorganism reported in the table according to ASTM F838

AIR FLOW RATE CURVES





STERYFLON Plus ADM FREE MINI CARTRIDGES ORDERING INFORMATION

PTFA - 100 1 - SK - [ ] PH

END FITTING	CODE
SOE: single open end with internal o-ring 2.116	**100**

ABSOLUTE FILTRATION RATING micron	CODE
0,1	**SJ ***
0,2	**SK ***
0,2	**SKA ****

*Integrity by IPA diffusion test
**Integrity by water intrusion test

CODE	PRODUCT GRADE
PH	Non-pyrogenic Grade. Quality Certification in the box
PHH	Non-pyrogenic Grade. Quality Certification, with serial number, in the box

CODE	NOMINAL LENGTH
1	135 mm

CODE	GASKETS	
No code	Standard	Silicone

The data are informative and subject to change without notice. User is responsible for determining whether the product is fit for particular purpose and suitable for User's method of application.

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