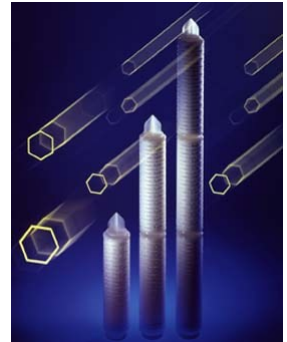


STERYSAN TSA-PH

- Easy integrity testable in situ
- Repeatedly steamable in situ or in autoclave
- Sanitizable
- Thermowelded construction
- EC-listed materials for Food contact
- FDA-listed materials per CFR21
- Bio-Safety per USP—Plastics
- Validation Guide available on request



STERYSAN TSA-PH cartridge is final sterilizing filter for general application in pharmaceutical industries; prefluxed with pyrogenic water and with certification of quality reporting the serial number, it is utilized in critical applications.

Steryflus cartridges have liquid absolute filtration ratings from 0,2 micron to 0,45 micron; 0,2 micron is available with single and double membrane layers.

Manufacturing is completed in a controlled environment; each cartridge is integrity tested and the limits of acceptability are monitored on regular basis by bacteria challenge test.

MATERIALS OF CONSTRUCTION

Filter media	PES membrane
Upstream supports	polypropylene
Downstream supports	polypropylene
Internal Core	polypropylene
External cage	polypropylene
End caps	polypropylene

FOOD-SAFETY

STERYFSAN TSA-PH filter elements meet regulation (EC) 1935/2004 for indirect food contact.

BIO-SAFETY

Filter media and components pass USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics. 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).

QUALITY STANDARDS

Produced under a certified Quality System to guarantee traceability of manufacturing records and integrity testing results.

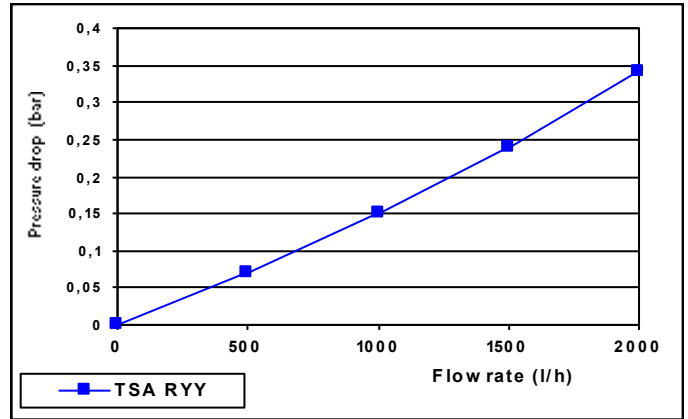
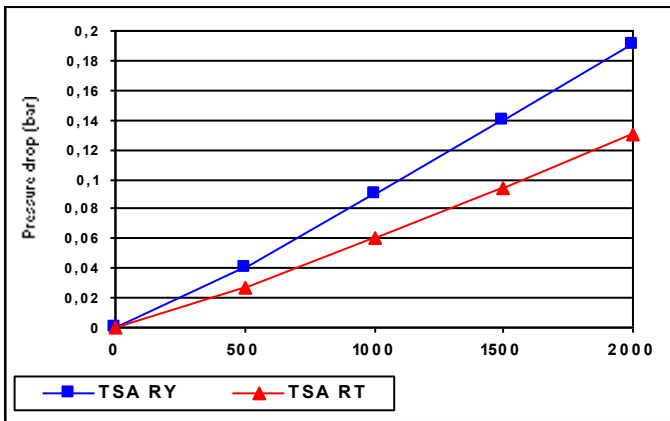
OPERATING CONDITIONS

- max. continuous temperature	65 °C
- max. continuous temperature for vent filter in recirculation loop	20 hours at 135 °C or 40 hours at 121 °C (cycles of 30')
- sanitization with hot water	80 °C max
- sanitization with chemicals	can be sanitized by standard chemical agents
- max. differential pressure	5,0 bar at 25 °C - 1,7 bar at 80 °C
- recommended change out differential pressure	2,0 bar at 25 °C

CODE	ABSOLUTE FILTRATION RATING IN LIQUIDS	BACTERIAL RETENTION >10 ⁷ CFU/cm ² *	ACCEPTABLE LIMIT FOR INTEGRITY TEST WITH WATER FOR 10" CARTRIDGE (ml/min)
RYY	0,2 µm double membrane	Brevundimonas diminuta	≤ 30 @ 2,8 bar
RY	0,2 µm	Brevundimonas diminuta	≤ 30 @ 2,8 bar
RT	0,45 µm	Serratia marcescens	≤ 30 @ 1,7 bar

* as per ASTM F838

WATER FLOW RATE FOR 10" CARTRIDGE



STERYSAN TSA-PH ORDERING INFORMATION

TSA - 207 1 - RY - [] - PH

END FITTING	CODE
DOE: double open end with flat gaskets	200
SOE: open end with (2) O-Ring 2.222. Blind end with flat top.	203
SOE: open end with (2) O-Ring 2.226 and 2 bayonet locks. Blind end with fin.	207
SOE: open end with (2) O-Ring 2.222. Blind end with fin.	208

ABSOLUTE FILTRATION RATING MICRON	CODE
0,2 double membrane	RYY
0,2	RY
0,45	RT

CODE	PRODUCT GRADE
PH	Biological Grade tested and prefluxed with pyrogenic water. Quality Certification in the box.
PHH	Biological Grade tested and prefluxed with pyrogenic water. Quality Certification in the box with serial number.

CODE	NOMINAL LENGTH
05	5"
1	10"
2	20"

CODE	GASKETS	
No code	Standard	Silicone
E	On request	EPDM
V	On request	VITON
K	On request	SOFT TEFLON

Data contained in this bulletin 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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