



PURAFIX® ZP

DEPTH FILTER SHEETS WITH ZETA-POTENTIAL

Description These filter sheets are manufactured from specially selected raw materials such as purified and bleached cellulose and natural filter aids. This filter sheet exhibits a zeta-potential and is used from coarse filtration to germ-reducing and sterilizing filtration in various industries.

Components Purified and bleached cellulose from sustainable sources, natural filter aids, wet strength agents, cationization agent

Formats All standard sizes and tailored formats are available.

Extractable Endotoxins < 0.125 EU/mL after rinsing with 50 L/m² WFI.

Extractable Ions

Ca	Mg	Pb	Zn	Cd	Cu	Ni	Co	Fe	Al
<1.0	<0.5	<0.06	<0.01	<0.005	<0.01	<0.02	<0.025	<0.05	<0.05

mg/L after rinsing with 50 L/m² WFI

Product Range

Grade	Retention rate [µm]	Water value ⁽¹⁾ [L/m ² ×min]	Thickness [mm]	Ash content [%]	Filtration type
ZP 15	8.0 – 20.0	960 – 1240	3.5 – 3.7	19.5 – 24.5	Coarse
ZP 31	5.0 – 12.0	280 – 360	4.4 – 4.6	39.5 – 44.5	Fine
ZP 71	1.5 - 3.0	170 – 210	3.7 – 3.9	35.5 – 40.5	Fine
ZP 145	0.1 – 0.3	19.0 – 29.0	3.9 – 4.1	47.5 – 52.5	Sterile

⁽¹⁾ Δp = 1.0 bar, the indicated water value does not correspond to the effective flow rate

Bacterial Retention

Grade	Bacterial strain	Number of cells	LRV
ZP 145	Serratia marcescens	1.0 × 10 ⁹ /cm ²	>8.0

Operating Conditions

Parameter	Recommendation
Maximum differential pressure	2.5 bar
Maximum differential pressure for sterile filtering sheets	1.2 – 1.5 bar
Rinsing volume	50.0 L/m ²
Sterilization	Water 85 °C / Steam 125 °C

Chemical Stability

Substance	[%]	°C		Substance	[%]	°C		Substance	[%]	°C	
		20	80			20	80			20	80
NaOH	1.0	r	r	HCl	5.0	r	lr	SO ₂	0.1	r	n/a
NaOH	2.0	r	lr	HNO ₃	5.0	r	lr	Acetone	conc	r	r
Peracetic ac.	0.1	r	lr	H ₂ SO ₄	10.0	r	lr	Ethanol	80.0	r	r
Acetic acid	20.0	r	r	Citric acid	10.0	r	r	Butanol	80.0	r	r

This table is for guidance purposes only, r = resistant, lr = limited resistance

Quality Assurance

Certified to:

- ISO 9001 (quality management)
- ISO 14001 (environmental management)
- ISO 22000 (food safety)
- Kosher standard

Compliant to:

- Recommendation XXXVI/1 of the German Federal Institute for Risk Assessment (Bundesinstitut für Risikobewertung, BfR)
- FDA (US Food and Drug Administration) 21 CFR 177.2260 e-k

Packaging and Storage

Filter sheets are hygienically shrink-wrapped and packaged in cardboard boxes. They must be stored in their original packaging in a dry, odorless and well-ventilated area. The sheets should be used within 36 months from the date of manufacture.

Disposal

The respective official regulations for disposal must be followed depending on the filtered product. Uncontaminated sheets can be disposed of as non-hazardous waste.

Remarks

The validity of the information cannot be guaranteed for every application. All information is based on current knowledge and does not claim to be complete. No liabilities can be derived from this information. FILTROX reserves the right to make changes in the course of technical improvements.