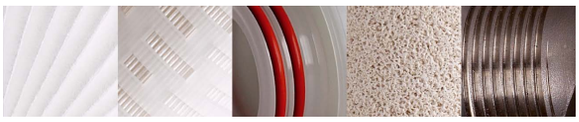
SupaPore Nanofibre



Positive Charged Nanofibre Filters

Amazon Filters' SupaPore NanoFibre filters contain a pleated filter media that exhibits a very high level of positive charge. This provides a cartridge that offers both high flow and efficient removal of ultrafine contaminants. The heart of the filter is a nanoalumina and glass microfibre media that delivers >50 millivolts Zeta potential at pH 7.2. This construction also produces a filter media with a very high internal surface area - a sheet of media of 1m^2 has approximately 42,000 m^2 internal surface area. Therefore SupaPore NanoFibre filters are a very cost effective method for removing negatively-charged contaminants from aqueous solutions and polar solvents.

Typical Applications

SupaPore NanoFibre filters are an alternative to the use of ultrafiltration or very fine sub-micron membrane filters for many applications. The media has passed USP Class VI Plastics testing and meets NSF standards 42 and 53 for potable water, so can be used in both critical and industrial applications. The high level of positive charge allows the use of a relatively open porous structure, providing much higher flow rates when compared to existing technology.

Typical applications include :-

- Removal of endotoxins from purified water and pharmaceutical processes*[1]
- Bacterial bioburden reduction and virus removal
- Purification of drinking water
- Protection of RO membranes from premature fouling by colloids, organic material, particulates etc
- Activated carbon capture
- Reduction in levels of heavy metals from waste streams e.g. in plating facilities
- Dissolved trace oil removal
- Rouge removal in boiler/heat exchanger applications

Features and Benefits

- Relatively open porous structure offering high flow rates and long in-process life times
- High Zeta potential for effective removal of ultrafine contaminants
- Enormous internal surface area providing high capacity for contaminant removal
- Media tested to ensure suitability for critical processes including pharmaceutical applications and potable water
- Product Validation Guide available

*[1] Not recommended for dialysis applications

Industries and Applications

Water Treatment	Removal of endotoxins from purified water, RO protection
Pharmaceutical processes	Bioburden and endotoxin reduction
Potable water	Removal of contaminants
Waste water treatment	Removal of heavy metals, emulsions

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SupaPore Nanofibre Technical Data

Dimensions

Outside diameter:	68.5mm
Typical surface area:	0.22m^2 per 10" filter

Sterilisation and Sanitisation*2

Steam or Autoclave:	121°C for 15 mins (40 cycles)
Hot Water:	90°C for 30 mins (0.2 bar Δp max)

*2 Applies to single open end cartridges only. For all steaming and hot water applications, the Glass Filled end cap option must be used.

Maximum Operating Conditions

Temperature: 80°C

Recommended Maximum Differential Pressure:

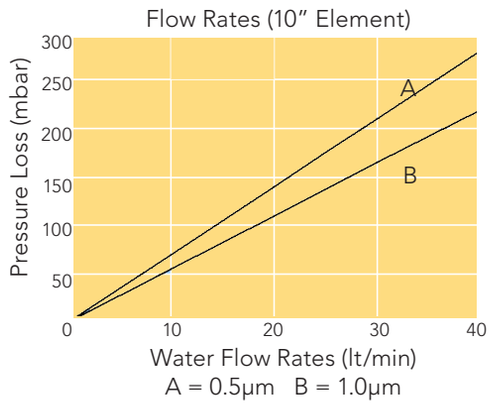
Forward Flow:	4.0 Bar @ 20°C
Reverse Flow:	3.5 Bar @ 20°C

Recommended change-out differential pressure: 2.5 Bar

Materials of Construction

Filter Media:	Nanoalumina and glass microfibre
Media support:	Polypropylene

Product validation guide available on request. All SupaPore Nanofibre cartridges are manufactured under strict control with batch number identification, giving full traceability on all components.



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