Product Information

- Highest flow rates due to increased effective filtration area
- Ideal solution for filtration of water-based pharmaceutical formulations
- Broadest chemical compatibility & highest thermal resistance

Sartopore® 2 HF
Sterilizing-Grade Filter Elements

Maximum Flow Rate Performance

Due to its enlarged effective filtration area, the single layer hydrophilic polyethersulfone membrane gives Sartopore® 2 HF higher flow rate performance in the target applications than any other sterilizing-grade filter. Thus ensuring shortest filtration cycle times and minimized total costs.
Broader Compatibility and Excellent Wettability

In addition to its outstanding performance, the single layer polyethersulfone membrane gives Sartopore® 2 HF broad chemical compatibility, including a pH-range from pH 1 to pH 14, and a high thermal resistance. Sartopore® 2 HF filter cartridges can be easily wetted for integrity testing even after drying at 80°C for 12 hours.

Safety & Reliability

Sartopore® 2 HF filter cartridges 0.2 μm rated are fully validated as sterilizing-grade filters according to current ASTM F-838 guidelines. Each individual element is tested for integrity by bubble point and diffusion test prior to release assuring absolute reliability.

Applications

- Buffers
- Large volume parenterals
- WFI
- Cleaning and sanitizing agents
- Bulk pharmaceutical products
- Applications requiring high flow rates

Services

Sartorius Confidence® Validation Services is the perfect complement to Sartopore® 2 HF filters. Our services provide

- Extractables and leachables services
- Microbiological testing
- Physicochemical testing

in compliance with regulatory requirements. Our local teams of validation experts support you with our tailored and consultative approach to determine the most cost-effective solution and give you the confidence you need to succeed.

Technical Specifications

| Available Sizes | Filtration Area | Max. Diffusion at 2.5 bar | 36 psi [ml/min] | Min. Bubble Point [bar | psi] |
|----------------|----------------|--------------------------|----------------|--------------------------|
| Cartridges     |                |                          |                |                          |
| Size 1         | 0.7 m² | 7.5 ft²                | 21             | 3.2 | 46 |
| Size 2         | 1.4 m² | 15.1 ft²                | 42             | 3.2 | 46 |
| Size 3         | 2.1 m² | 22.6 ft²                | 63             | 3.2 | 46 |
Max. Allowable Differential Pressure

**Cartridges**
- 5 bar | 72.5 psi at 20°C
- 2 bar | 29 psi at 80°C

Max. Allowable Back Pressure

2 bar | 29 psi at 20°C
(for all elements)

Pore Size Combination

0.2 μm (single layer)

Materials

- **Prefilter Membrane**
  Polyethersulfone, asymmetric

- **Endfilter Membrane**
  Polyethersulfone, asymmetric

- **Support Fleece**
  Polypropylene

- **Core**
  Polypropylene

- **End Caps**
  Polypropylene

- **Outer Support**
  Polypropylene

- **O-Ring**
  Silicone
  (other materials on request)

Regulatory Compliance

- Each individual element is tested for integrity by bubble point and diffusion test
- Fully validated as sterilizing-grade filters according to ASTM current F-838 guidelines
- Designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System
- Meet or exceed the requirements for WFI quality standards set by the current USP
- Non pyrogenic according to USP Bacterial Endotoxins
- USP Plastic Class VI Test
- Non fiber releasing according to 21 CFR
Sterilization

**Cartridges**
In-Line Steam Sterilization  
Max. 134 °C, 0.3 bar, 20 min.  
Min. 25 Sterilization Cycles

or

**Autoclaving**  
Max. 134°C, 2 bar, 30 min  
Min. 25 Sterilization Cycles

Technical References

Validation Guide 2665255  
Extractables Guide SPK5742-e

Performance

**Flow Rate Comparison**

![Flow Rate Comparison Graph]

- Sartopore® 2 HF 0.2 μm  
- PVDF 0.2 | 0.2 μm  
- PVDF 0.22 μm  
- PESU 0.45 μm | 0.2 μm  
- Nylon 0.2 | 0.2 μm

30” Filter cartridges at 1 bar | 14.5 psi differential pressure (20°C)

**Water Flow Rates for Standard Cartridges**

![Water Flow Rates Graph]

Differential Pressure [bar]  
Flow Rate [m³/h]

- 10”  
- 20”  
- 30”

Standardized at 20°C

Ordering Information

**Cartridge**

| 544 | 25 | 07 | A | ----HF |

**Filter Size**

1: 0.7 m² | 7.5 ft² (10”)  
2: 1.4 m² | 15.1 ft² (20”)  
3: 2.1 m² | 22.6 ft² (30”)

**Adapter**

25: 2 flange bayonet adapter  
with 226 double o-ring

(Standard with silicone o-ring optional with EPDM or fluoroelastomer o-ring.)