LABORATORY

Supor® PES Membrane Disc Filters

Description

High Flow Rate Membrane

- Fast filtration with excellent flow rates and high throughputs saves time and money with fewer filter changes per sample volume
- Low protein binding and high drug compatibility for critical applications
- 142 and 293 mm discs feature printed tab for instant recognition of pore size and lot number

Application

- Suited for biological, pharmaceutical, and sterilizing filtration requirements*
- Available for microbiological analysis in individual packaging

Specifications

Filter Media
Hydrophilic polyethersulfone (PES)

Pore Size
0.1, 0.2, 0.45, and 0.8 µm

Diameter
13 - 293 mm

Typical Thickness
0.1 µm: 132 µm (5.2 mils)

0.2 µm: 145 µm (5.7 mils)
0.45 and 0.8 µm: 140 µm (5.5 mils)

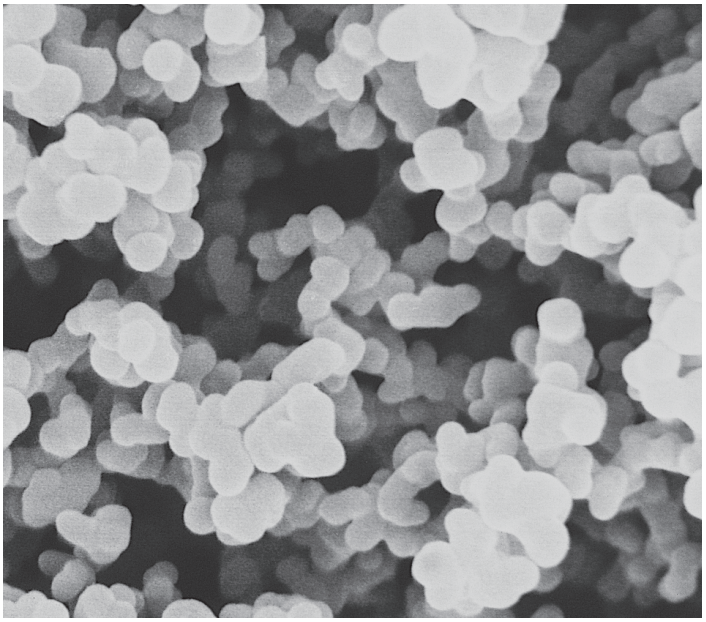
Typical Water Flow Rate
mL/min/cm² at 0.7 bar (70 kPa, 10 psi)
0.1 µm: 5
0.2 µm: 26
0.45 µm: 58
0.8 µm: 165

Maximum Operating Temperature - Water
100 °C (212 °F)

Extractables - Soxhlet Extraction
< 4%**

Minimum Bubble Point - Water
0.2 µm: 3.5 bar (350 kPa, 51 psi)
0.45 µm: 2.5 bar (250 kPa, 36 psi)
0.8 µm: 1.0 bar (100 kPa, 15 psi)

Minimum Bubble Point - 60% IPA/40% H2O (v:v)
0.1 µm: 2.4 bar (240 kPa, 35 psi)



Biological Safety
Passes United States Pharmacopeia (USP) Biological Reactivity Test, In Vivo <88>

Sterilization
Provided non-sterile. Can be sterilized by autoclaving at 121 – 123 °C (250 – 253 °F) for 30 min.
PN 60043, 65472 and 66234 are provided gamma-irradiated.

Wetting Time (Water)
0.1 µL ≤1 second
0.2 µL ≤5 seconds
0.45 µL ≤1 second
0.8 µL ≤1 second

Biological Tests Growth Promotion
The membranes demonstrate typical recovery of the target microorganisms listed below as directed per Standard Methods for Examination of Water and Wastewater

Bacterial Recovery (PN 66234)
0.2 µm >90% batch average of *P. aeruginosa* ATCC 14207 on TSA microbiology media (bacterial recovery)

Bacterial Retention
0.1 µm produces sterile effluent when challenged with *A.laidlawii* in a double layer; following modified ASTM F838-38

*Sterilizing grade applies to 0.1 and 0.2 µm only
** Does not apply to 0.8 µm

Certifications

Regulatory Qualifications

QA lot release criteria are monitored for compliance to Standard Methods for Examination of Water and Wastewater.

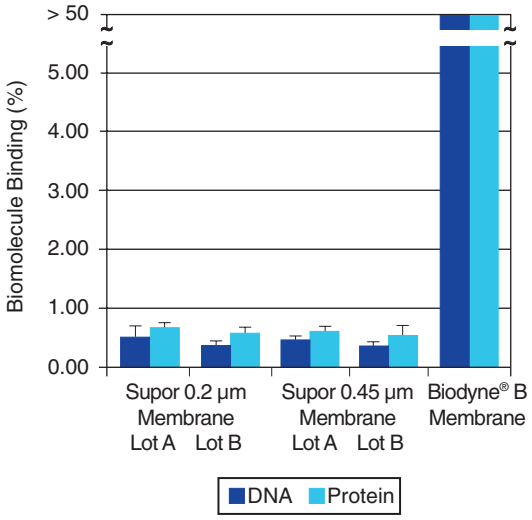
These products are manufactured in a Pall facility under a Quality Management System and Environmental Management program approved by an accredited registering body to ISO 9001 and ISO 14001, respectively.

Irradiation Details

Our membranes are provided non-sterile or gamma irradiated with a maximum dosage of 30 kGy. A Quarterly Dose Audit on the membrane product family is conducted to demonstrate continued effectiveness of the dose deliverance as required in ANSI/AAMI/ISO 11137-2. Non-sterile membranes can be autoclaved at 121 – 123 °C (250 – 153 °F) at 1.0 bar (100 kPa, 15 psi) for 30 minutes.

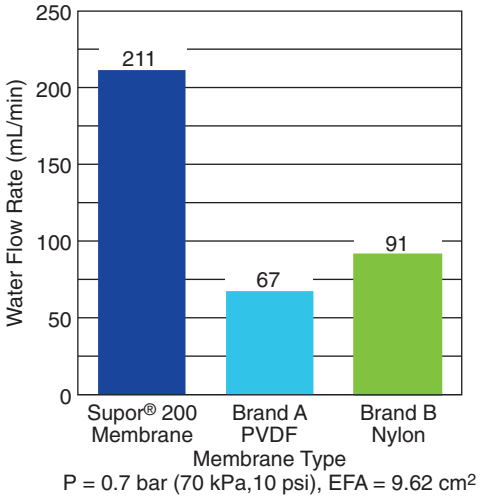
Performance

Supor Membrane is Low in Biomolecule Binding



^{125}I-labeled BSA (1.6 µg) or 32P-labeled DNA (500 ng) was diluted to 5 mL in PBS (BSA) or Tris-EDTA (DNA) and filtered through a 13 mm disc of the indicated membrane. Filtration was carried out using a 10 mL syringe at a flow rate of 1.0 mL/minute. Binding was determined by comparing the amount of radioactivity remaining in the membrane (triplicate) to the activity of the starting material by counting the disc or solution in a scintillation counter. Biodyne B membrane is designed for biomolecule binding and was used as a positive control.

Membrane Water Flow Rate



Supor polyethersulfone membrane flow rate outperforms nylon and PVDF membranes of the same pore size (0.2 µm). Individual results may vary.

Ordering Information

Supor 100 Membrane Disc Filters, 0.1 µm

Part Number	Description	Pkg
60309	25 mm, plain	100/pkg
60310	47 mm, plain	100/pkg
60311	90 mm, plain	100/pkg
60312	142 mm, tabbed	25/pkg
66551	142 mm, no tab	25/pkg
66552	293 mm, no tab	25/pkg

Supor 200 Membrane Disc Filters, 0.2 µm

Part Number	Description	Pkg
60298	13 mm, plain	100/pkg
60300	25 mm, plain	100/pkg
60301	47 mm, plain	100/pkg
66234	47 mm, grid, individual, gamma irradiated pack (S-Pack)	200/pkg
60334	90 mm, plain	100/pkg
66549	142 mm, no tab	25/pkg
60305	142 mm, tabbed	25/pkg
60307	293 mm, tabbed	25/pkg
66550	293 mm, no tab	25/pkg
68123	47 mm, gridded, Sentino® dispenser pack, gamma irradiated	1000/pkg

Supor 450 Membrane Disc Filters, 0.45 µm

Part Number	Description	Pkg
60170	13 mm, plain	100/pkg
60172	25 mm, plain	100/pkg
60173	47 mm, plain	100/pkg
61854	47 mm, grid	100/pkg
60043	47 mm, grid, individual, gamma irradiated pack (S-pack)	200/pkg
60174	50 mm, plain	100/pkg
60206	90 mm, plain	100/pkg
60175	102 mm, plain	100/pkg
60177	142 mm, tabbed	25/pkg
66553	142 mm, no tab	25/pkg
60179	293 mm, tabbed	25/pkg
66554	293 mm, no tab	25/pkg

Supor 800 Membrane Disc Filters, 0.8 µm

Part Number	Description	Pkg
60109	25 mm, plain	100/pkg
60110	47 mm, plain	100/pkg
65472	47 mm, grid, gamma irradiated	200/pkg
60112	90 mm, plain	100/pkg
60114	142 mm, tabbed	25/pkg
66555	142 mm, no tab	25/pkg
60116	293 mm, tabbed	25/pkg
66556	293 mm, no tab	25/pkg

PALL CORPORATION

Corporate Headquarters
Port Washington, NY, USA
+1-800-717-7255 toll free (USA)
+1-516-484-5400 phone

European Headquarters
Fribourg, Switzerland
+41 (0)26 350 53 00 phone

Asia-Pacific Headquarters
Singapore
+65 6389 6500 phone

Visit us on the Web at www.pall.com/laboratory
Contact us at www.pall.com/contact

Pall Corporation has offices and plants throughout the world. To locate the Pall office or distributor nearest you, visit www.pall.com/contact.

The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

IF APPLICABLE Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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