

Anopore™ inorganic membranes

The Anopore inorganic membrane (Anodisc™) is excellent for a wide range of laboratory filtration applications. This material has a precise, nondeformable honeycomb pore structure, with no lateral crossover between individual pores, that filters at precisely the stated cut-off, allowing no larger sized particles to pass through the membrane. The Anopore inorganic membrane is composed of a high-purity alumina matrix that is manufactured electrochemically. The membrane also exhibits low protein binding, has minimal autofluorescence, is nontoxic, and supports cellular growth.

The precise pore structure and narrow pore size distribution of the Anopore membrane ensure a high level of particle removal efficiency. Microorganisms and particulate material are captured on the surface of the membrane for subsequent analysis by light or electron microscopy. When wet, the membrane is virtually transparent, which means that retained particles do not need to be transferred to another surface before microscopic examination.

The membrane is hydrophilic and is compatible with most solvents and aqueous material. No monomers, plasticizers, adhesives, surfactants or wetting agents are used in the manufacturing process, which removes sample contamination and ensures low protein binding and minimal loss of sample.

The Anopore membrane is supplied in the form of Anodisc membrane filters. The membrane is peripherally bonded to an annular polypropylene ring (except the 13 mm diameter disc) for ease of handling and is suitable for both vacuum and pressure filtration.

Anopore is available in three nominal pore sizes: 0.02 μm , 0.1 μm and 0.2 μm and in three diameters: 13 mm, 25 mm and 47 mm.

Features and benefits

- High pore density and narrow pore size distribution make it an extremely precise membrane
- Wide solvent compatibility reduces the need to stock a variety of membranes in the laboratory
- Minimizes additives used in the manufacturing process ensures minimal extractables and no sample contamination
- Extremely low protein binding minimizes sample loss
- Virtually transparent when wet, making it suitable for microscopy studies

Applications

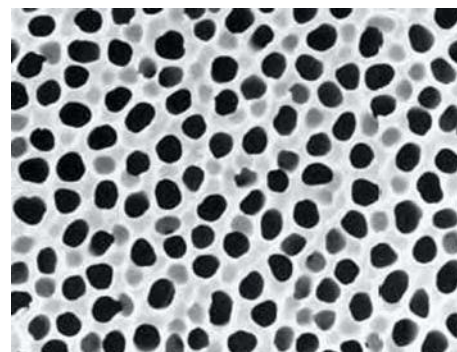
- HPLC mobile phase filtration and degassing
- Ultra cleaning of solvents
- Gravimetric analysis
- Liposome extrusion
- Scanning electron microscopy studies
- Bacterial analysis by epifluorescence light microscopy
- Micrometer and nanometer filtration
- Metal nanorods formation



Anodisc Circle with Support Ring



Anopore Inorganic Membranes Without Support Ring



Anodisc pore structure

Typical properties – Anopore inorganic membranes

	Anodisc 13	Anodisc 25	Anodisc 47
Average membrane thickness	60 µm	60 µm	60 µm
Membrane diameter	13 mm	21 mm	43 mm
Membrane type	Anopore aluminum oxide	Anopore aluminum oxide	Anopore aluminum oxide
Support ring material	None	Polypropylene	Polypropylene
Construction process	N/A	Thermal weld	Thermal weld
Protein adsorption	Low	Low	Low
Burst strength	65-110 psi	–	–
Maximum service temperature	400°C	40°C	40°C
Porosity	25–50%	25–50%	25–50%
Autoclavable	Yes	No	No
Refractive index	1.6	1.6	1.6

Ordering information – Anopore inorganic membrane circles (Anodisc)

Diameter (mm)	Membrane	Pore size (µm)	Catalog number	Hydrophilic	Protein binding	Ssolvent resistance	Quantity/pack
13	Anodisc 13*	0.02	6809-7003	Yes	Low	Very good	100
13	Anodisc 13*	0.1	6809-7013	Yes	Low	Very good	100
13	Anodisc 13*	0.2	6809-7023	Yes	Low	Very good	100
25	Anodisc 25	0.02	6809-6002	Yes	Low	Very good	50
25	Anodisc 25	0.1	6809-6012	Yes	Low	Very good	50
25	Anodisc 25	0.2	6809-6022	Yes	Low	Very good	50
47	Anodisc 47*	0.02	6809-5502	Yes	Low	Very good	50
47	Anodisc 47	0.02	6809-5002	Yes	Low	Very good	50
47	Anodisc 47	0.1	6809-5012	Yes	Low	Very good	50
47	Anodisc 47*	0.2	6809-5522	Yes	Low	Very good	50
47	Anodisc 47	0.2	6809-5022	Yes	Low	Very good	50

* Without support ring



Anopore Inorganic Membranes Without Support Ring