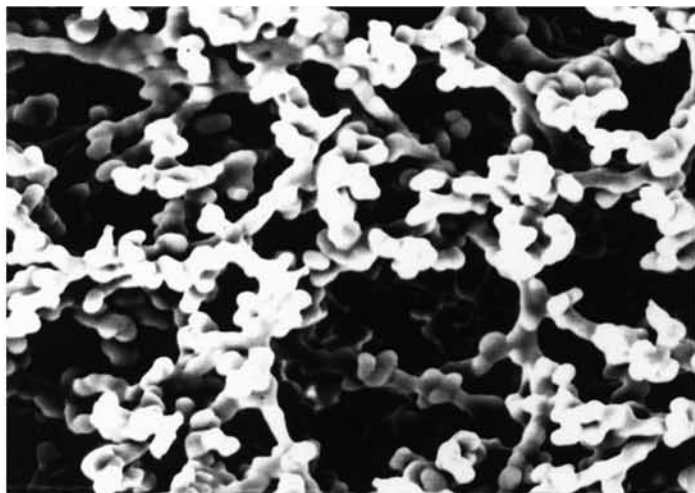
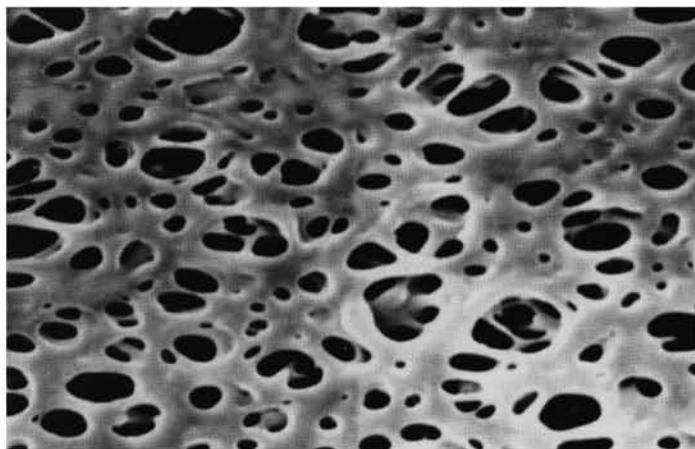


amcAccupor



Typical 0.2 µm



Typical 0.65 µm

amcAccupor membrane is a highly microporous membrane composed of modified polyethersulfone that is a tough, durable, and temperature resistant aromatic polymer.

amcAccupor membrane provides high flow rate, low extractables, and greater mechanical strength than competitive membranes. This membrane was specifically designed for biological, analytical, electronic, pharmaceutical, beverage, and sterilizing filtration applications.

amcAccupor membrane is available in pore sizes ranging from 0.03 µm to 5 µm. It is inherently hydrophilic as standard, but can be made hydrophobic upon request.

Performance Advantages

High flow rates and throughputs allowing faster filtration times

Low protein binding and high drug compatibility to maximize recovery of critical media components

No external wetting agents added (in hydrophilic² version) to avoid the introduction of unwanted extractables into your solution

High durability permitting repeated folding without breaking

High thermal stability which permits autoclave sterilization

Versatile sterilizability enabling sterilization by gamma radiation or EtO

Features/Benefits

Manufactured under cGMPs to ensure highest level of quality and consistency

High throughputs to minimize filter change during batch processing

Chemically resistant aromatic polymer membrane to eliminate problems associated with hydrolysis of the filter media during use

Low extractables to assure product purity

Specifications

Membrane Material

Modified hydrophilic polyethersulfone

Nominal Pore Sizes

0.03, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2, 5.0 µm

Maximum Operating Temperature

100°C (212°F) - Water

Typical Weight

3.0 mg/cm²

Typical Thickness

0.12 mm (4.7 mils)

Extractables

≤ 1% - Boiling Water

Endotoxin Level

< 0.25 Eu/ml utilizing 400 cm²/400 ml S.W.F.I. per Limulus Amoebocyte Lysate (LAL) test

Sterilization

Provided non-sterile. May be gamma sterilizable and autoclavable if desired.

Minimum Bubble Point

0.03 µm:	45 psi (3.2 bar) - IPA
0.1 µm:	30 psi (2.1 bar) - IPA
0.2 µm:	49 psi (3.4 bar) - Water
0.45 µm:	38 psi (2.7 bar) - Water
0.65 µm:	27 psi (1.9 bar) - Water
0.8 µm:	16 psi (1.1 bar) - Water
1.2 µm:	8 psi (0.6 bar) - Water
5 µm:	5 psi (0.4 bar) - Water

Typical Water Flow Rate

(secs/100 ml H₂O/9.62 cm² at 24" Hg)

0.03 µm:	≤ 220	0.65 µm:	≤ 17
0.1 µm:	≤ 130	0.8 µm:	≤ 8
0.2 µm:	≤ 30	1.2 µm:	≤ 8*
0.45 µm:	≤ 21	5 µm:	≤ 25*

^asecs/250 ml H₂O/9.62 cm² at 24" Hg

^bsecs/250 ml H₂O/9.62 cm² at 3" Hg

Burst Strength

0.03 µm:	≤ 20 psi	0.65 µm:	≤ 10 psi
0.1 µm:	≤ 18 psi	0.8 µm:	≤ 10 psi
0.2 µm:	≤ 16 psi	1.2 µm:	≤ 8 psi
0.45 µm:	≤ 16 psi	5 µm:	≤ 8 psi

Biosafety

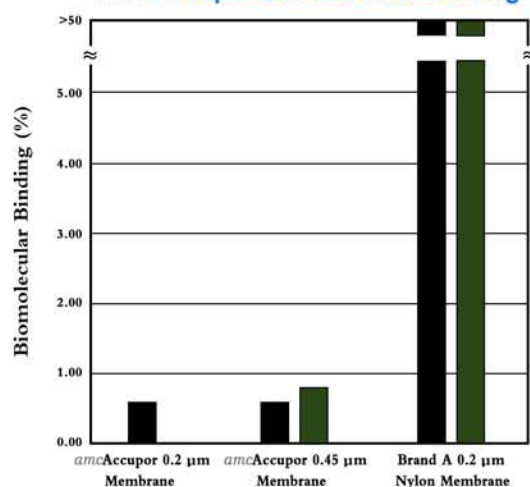
Passes USP Class VI-121°C Plastics Tests, and is listed as being acceptable for food contact according to the Code of Federal Regulation, Title 21

Bacterial Retention

Provided separately*

* For more information, please contact us.

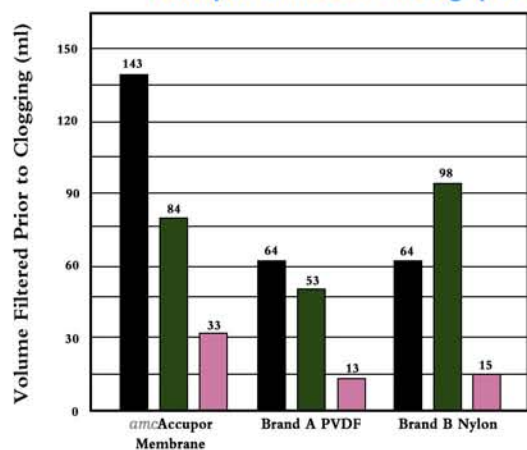
amcAccupor Biomolecular Binding



■ DNA
■ Protein

¹²⁵I-labeled BSA (1.6 µg) or ³²P-labeled DNA (500 ng) were diluted in PBS (BSA) to 5 ml or Tris-EDTA (DNA) and filtered through a 13 mm disc of the indicated membrane. Filtration was conducted 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. Brand A nylon membrane is designed for biomolecular binding and was used as a positive control.

amcAccupor Filtration Throughput



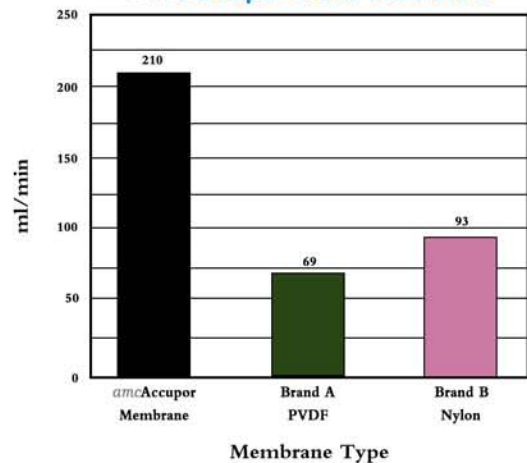
■ 50% Dextrose
■ 2.5% TSB
■ 10% BSA

TSB = Trypticase Soy Broth
BSA = Bovine Serum Albumin

Membrane Type (0.2 µm)

P = 10 psi (0.7 bar), EFA = 9.62 cm²

amcAccupor Water Flow Rate



■ amcAccupor 0.2 µm Membrane
■ Brand A 0.2 µm PVDF Membrane
■ Brand B 0.2 µm Nylon Membrane

Membrane Type

P = 10 psi (0.7 bar), EFA = 9.62 cm²

amcAccupor modified polyethersulfone membranes outperform nylon and PVDF membranes of the same pore size in terms of biomolecular binding, flow rate and total throughput.

amcAccupor Chemical Compatibility

Acids	Acetic acid, glacial	R	Halogenated Hydrocarbons	Carbon tetrachloride	R
	Acetic acid (30%)	R		Chloroform	NR
	Acetic acid (10%)	R		Ethylene dichloride	NR
	Hydrochloric acid, conc. (37%)	R		Freon® TF	R
	Hydrochloric acid, 6N (20%)	R		Methylene chloride	NR
	Hydrochloric acid, 1N (3.3%)	R		Perchloroethylene	L
	Nitric acid, conc. (67%)	NR		Tetrachloroethylene	R
	Sulfuric acid, conc. (96%)	NR		TMC Freon® TMC	NR
Alcohols	Amyl alcohol	NR	Ketones	Acetone	NR
	Benzyl alcohol	NR		Cyclohexanone	NR
	Butanol	R		Methyl ethyl ketone	NR
	Ethanol	R		Methyl isobutyl ketone	R
	Isopropanol	R	Miscellaneous	Acetonitrile	R
	Methanol	R		Aniline	NR
	Propanol	R		Dimethyl formamide	NR
Aromatic Hydrocarbons	Benzene	R		Formaldehyde, 37%	R
	Toluene	R		Formaldehyde, 4%	R
	Xylene	R		Gasoline	R
Bases	Ammonium hydroxide, 6N (11.4%)	R		Hexane, dry	L
	Ammonium hydroxide, 3N (5.7%)	R		Kerosene	R
	Potassium hydroxide, 3N (15%)	R		Phenol, liquified	NR
	Sodium hydroxide, 6N (22%)	R		Pyridine	NR
	Sodium hydroxide, 3N (11%)	R		Turpentine	R
Esters	Ethyl acetate	L	Oils	Water	R
	Isopropyl acetate	R		Cottonseed	R
	Methyl acetate	NR		Peanut	R
Ethers	Ethyl ether	R	R: Resistant No significant change was observed in flow rate or bubble point of the membrane, nor visible indication of chemical attack.		
	Tetrahydrofuran	NR			
Glycols	Ethylene glycol	R			
	Glycerol	R	L: Limited Resistance Moderate changes in physical properties or dimensions of the membrane were observed. The filter may be suitable for short term, noncritical use.		
	Propylene glycol	R			
			NR: Not Recommended The membrane is basically unstable. In most cases, extensive shrinkage or swelling occurs. The filter may gradually weaken or partially dissolve after extended exposure.		

Ordering Information-Membrane Disc

Product Number	Description	Packaging
AC010DA3	0.1 µm, 13 mm, diameter	100/pkg
AC010DB3	0.1 µm, 25 mm, diameter	100/pkg
AC010DC3	0.1 µm, 47 mm, diameter	100/pkg
AC010DD3	0.1 µm, 90 mm, diameter	100/pkg
AC010DD2	0.1 µm, 90 mm, diameter	50/pkg
AC010DE1	0.1 µm, 142 mm, diameter	25/pkg
AC010DF1	0.1 µm, 293 mm, diameter	25/pkg
AC020DA3	0.2 µm, 13 mm, diameter	100/pkg
AC020DB3	0.2 µm, 25 mm, diameter	100/pkg
AC020DC3	0.2 µm, 47 mm, diameter	100/pkg
AC020DD3	0.2 µm, 90 mm, diameter	100/pkg
AC020DD2	0.2 µm, 90 mm, diameter	50/pkg
AC020DE1	0.2 µm, 142 mm, diameter	25/pkg
AC020DF1	0.2 µm, 293 mm, diameter	25/pkg
AC045DA3	0.45 µm, 13 mm, diameter	100/pkg
AC045DB3	0.45 µm, 25 mm, diameter	100/pkg
AC045DC3	0.45 µm, 47 mm, diameter	100/pkg
AC045DD3	0.45 µm, 90 mm, diameter	100/pkg
AC045DD2	0.45 µm, 90 mm, diameter	50/pkg
AC045DE1	0.45 µm, 142 mm, diameter	25/pkg
AC045DF1	0.45 µm, 293 mm, diameter	25/pkg
AC065DA3	0.65 µm, 13 mm, diameter	100/pkg
AC065DB3	0.65 µm, 25 mm, diameter	100/pkg
AC065DC3	0.65 µm, 47 mm, diameter	100/pkg
AC065DD3	0.65 µm, 90 mm, diameter	100/pkg
AC065DD2	0.65 µm, 90 mm, diameter	50/pkg
AC065DE1	0.65 µm, 142 mm, diameter	25/pkg
AC065DF1	0.65 µm, 293 mm, diameter	25/pkg
AC080DA3	0.8 µm, 13 mm, diameter	100/pkg
AC080DB3	0.8 µm, 25 mm, diameter	100/pkg
AC080DC3	0.8 µm, 47 mm, diameter	100/pkg
AC080DD3	0.8 µm, 90 mm, diameter	100/pkg
AC080DD2	0.8 µm, 90 mm, diameter	50/pkg
AC080DE1	0.8 µm, 142 mm, diameter	25/pkg
AC080DF1	0.8 µm, 293 mm, diameter	25/pkg

Ordering Information-Roll Stock

Product Number	Description	Packaging
AC003R01	0.03 µm, 50~200 m, linear length	1/pkg
AC010R01	0.1 µm, 50~200 m, linear length	1/pkg
AC020R01	0.2 µm, 50~200 m, linear length	1/pkg
AC045R01	0.45 µm, 50~200 m, linear length	1/pkg
AC065R01	0.65 µm, 50~200 m, linear length	1/pkg
AC080R01	0.8 µm, 50~200 m, linear length	1/pkg
AC120R01	1.2 µm, 50~200 m, linear length	1/pkg
AC500R01	5.0 µm, 50~200 m, linear length	1/pkg

** In addition to standard sizes, amcAccupor of all pore sizes can be cut to size to suit your specifications. For information on special-sized cuts, please contact us.*