



# **Devices** and Tubings

ReadyLyzer

Xpress Dialyzer

Xpress Equilibrium Dialyzer

MEMBRA-CEL® Dialysis Membranes

SERVAPOR® Dialysis Membranes

Spectra/Por® Dialysis Membranes



Dialysis is a simple, fast and efficient method for purification of proteins, peptides, DNA, RNA and oligonucleotides. It is a process where substances in solution are separated by their differences in molecular weight.

#### **Applications in Dialysis**

- Buffer exchange, re-buffering
- pH and buffer adjustment of sample solution, protein extract or cell extract
- Removal of salts, surfactants, solvents and detergents
- Sample concentration
- Sample preparation for mass spectrometry and other downstream applications
- Separation of high molecular weight macromolecules from low molecular weight substances

#### **Special Applications in Equilibrium Dialysis**

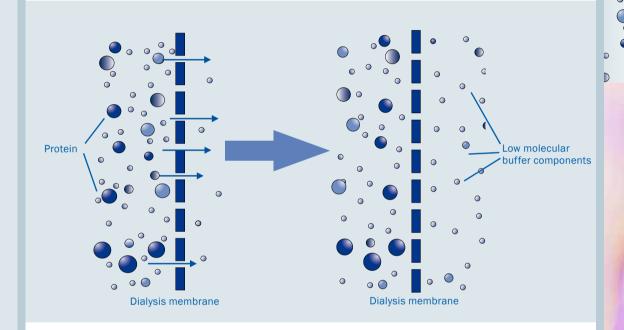
- Protein-drug binding assays
- Receptor binding assays
- Protein-protein and protein-DNA interaction
- Serum-protein binding

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# Introduction

Dialysis membranes are semipermeable, made of regenerated cellulose or cellulose ester having a gel-like structure. The driving force is the concentration difference between two solutions on opposite sides of the

membrane. Since the porous membrane selectively allows smaller solutes to pass while retaining larger species, dialysis can effectively be used as a separation process based on size rejection.



Since the dialysis membrane consists of a spongy matrix of crosslinked polymers, the pore rating referred to as Molecular Weight Cut Off (MWCO), is an indirect measure of the retention performance. The membrane MWCO is determined as the solute size that is retained by at least 90 %. However, since a solute's permeability is also dependent upon molecular shape, degree of hydration, ionic charge and polarity, it is recommended to select a

MWCO that is half the size of the MW of the species to be retained and/or twice the size of the MW of the species intended to pass through.

For dialysis of large volumes and general applications sturdy and economical dialysis tubings are still a good choice. Ready-to-use dialysis devices are easy-to-handle, allow fast and efficient dialysis of small volumes and high-throughput experiments.

# Ready-to-Use Dialysis Devices

Dialysis is the easiest and gentlest method for purification of nucleic acids and proteins. There is no need for additional chemicals or expensive lab equipment. However, due to laborious handling of dialysis tubings, unsuitability for small volumes or high-throughput and

long dialysis time many users avoid the method.

Ready-to-use dialysis devices overcome these hurdles: easy handling and fast dialysis with high recovery rates of small sample volumes make them ideal for high-throughput.

# A. ReadyLyzer

ReadyLyzers allow not only fast and efficient dialysis of small volumes, but as well of large volumes up to 20 ml. Tubes are simply opened and closed with a screw cap enabling easy sample withdrawal during dialysis.



- High Recovery > 97 %, minimal sample dilution
- Ultra-pure, low-binding regenerated cellulose
- No struggling with closures, no leaking knots, no risk of puncturing the membrane
- Delivered with a flotation ring for improved buoyancy and vertical orientation

#### ReadyLyzer Dialysis Devices

Туре	MWCO (kDa)	Volume	Size	Cat. no.
	6 - 8	10 - 250 µl	10 pieces	44620.01
ReadyLyzer 0.25	0 0	10 - 250 μι	30 pieces	44620.02
ReadyLyzer 0.25	12 - 14	10 - 250 µl	10 pieces	44621.01
	12 - 14	2 - 14 10 - 250 μι	30 pieces	44621.02
	1	50 - 800 μΙ	5 pieces	44622.01
	3.5	50 - 800 μl	10 pieces	44623.01
ReadyLyzer 0.8	3.5	30 - 800 μι	30 pieces	44623.02
	6 - 8	50 - 800 μΙ	10 pieces	44624.01
	0-8		30 pieces	44624.02
	3.5	0.1 - 3 ml	5 pieces	44625.01
			15 pieces	44625.02
ReadyLyzer 3	6 - 8	0.1 - 3 ml	5 pieces	44626.01
ReadyLyzer 3			15 pieces	44626.02
	12 - 14	0.1 - 3 ml	5 pieces	44627.01
	12 - 14	0.1 - 3 1111	15 pieces	44627.02
	1	10 ml	5 pieces	44628.01
ReadyLyzer 10	3.5	10 ml	10 pieces	44630.01
ReadyLyzer 10	6 - 8	10 ml	10 pieces	44632.01
	12 - 14	10 ml	10 pieces	44634.01
	1	20 ml	5 pieces	44629.01
ReadyLyzer 20	3.5	20 ml	10 pieces	44631.01
NeauyLyzer 20	6 - 8	20 ml	10 pieces	44633.01
	12 - 14	20 ml	10 pieces	44635.01



# B. Xpress Micro and Mini Dialyzer

The Xpress Micro and Mini Dialyzer are highly innovative ready-to-use dialysis devices for small sample volumes. The unique geometry allows extremely fast dialysis with very small volume change of protein, RNA and DNA sam-

ples. Due to low-binding plastic and small membrane surface area, the devices show excellent sample recovery compared to ultrafiltration and resin systems.

- High-quality, low binding regenerated cellulose membranes or Bio-Xell® biocellulose for high MWCO of 140 kDa
- Sample volumes of 10  $\mu$ l 100  $\mu$ l (MD100), 50  $\mu$ l 300  $\mu$ l (MD300) or 150  $\mu$ l 1 ml (MD1000)
- Fastest dialysis system on the market desalting in 30 min
- High yield up to 98 % sample recovery, minimal sample dilution
- Easy handling sample loading and retrieval with standard micropipettes
- Flexible scalable from 1 to 96 samples (Micro Dialyzer) or 1 to 48 samples (Mini Dialyzer)
- Automation compatible conforms to SBS Microplate Standard



Xpress Micro Dialyzer MD100

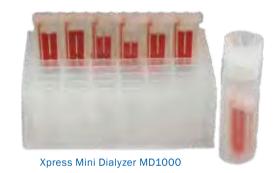
#### Xpress Micro Dialyzer MD100, sample volume 10 µl - 100 µl

Xpress Micro Dialyzer MD100, sample volume 10 μl – 100 μl							
MWCO (kDa)	Content	Size	Cat. no.				
2	8-micro dialyzer strip, detachable	8 pieces	46088.01				
_	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46089.01				
20	8-micro dialyzer strip, detachable	8 pieces	46090.01				
20	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46091.01				
140	8-micro dialyzer strip, detachable	8 pieces	46092.01				
140	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46093.01				
	single dialyzer in micro tube	12 pieces	46100.01				
	single dialyzer in micro tube, universal rack	56 pieces	46101.01				
3.5	single dialyzer in micro tube, universal rack	280 pieces	46102.01				
3.3	8-micro dialyzer strip, detachable	8 pieces	46103.01				
	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46104.01				
	6x 8-micro dialyzer strips, 48 deep well plate, incl. grid	1 kit	46105.01				
	single dialyzer in micro tube	12 pieces	46106.01				
	single dialyzer in micro tube, universal rack	56 pieces	46107.01				
6 - 8	single dialyzer in micro tube, universal rack	280 pieces	46108.01				
0 - 8	8-micro dialyzer strip, detachable	8 pieces	46109.01				
	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46110.01				
	6x 8-micro dialyzer strips, 48 deep well plate, incl. grid	1 kit	46111.01				
	single dialyzer in micro tube	12 pieces	46112.01				
	single dialyzer in micro tube, universal rack	56 pieces	46113.01				
12 - 14	single dialyzer in micro tube, universal rack	280 pieces	46114.01				
12 - 14	8-micro dialyzer strip, detachable	8 pieces	46115.01				
	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46116.01				
	6x 8-micro dialyzer strips, 48 deep well plate, incl. grid	1 kit	46117.01				

#### Xpress Micro Dialyzer MD300, sample volume 50 $\mu$ l – 300 $\mu$ l

MWCO (kDa)	Content	Size	Cat. no.
2	8-micro dialyzer strip, detachable	8 pieces	46094.01
2	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46095.01
20	8-micro dialyzer strip, detachable	8 pieces	46096.01
20	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46097.01
140	8-micro dialyzer strip, detachable	8 pieces	46098.01
140	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46099.01
	single dialyzer in micro tube	12 pieces	46118.01
3.5	8-micro dialyzer strip, detachable	8 pieces	46119.01
3.5	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46120.01
	6x 8-micro dialyzer strips, 48 deep well plate, incl. grid	1 kit	46121.01
	single dialyzer in micro tube	12 pieces	46122.01
6 - 8	8-micro dialyzer strip, detachable	8 pieces	46123.01
0 - 8	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46124.01
	6x 8-micro dialyzer strips, 48 deep well plate, incl. grid	1 kit	46125.01
	single dialyzer in micro tube	12 pieces	46126.01
12 - 14	8-micro dialyzer strip, detachable	8 pieces	46127.01
12 - 14	12x 8-micro dialyzer strips, 96 deep well plate	1 kit	46128.01
	6x 8-micro dialyzer strips, 48 deep well plate, incl. grid	1 kit	46129.01





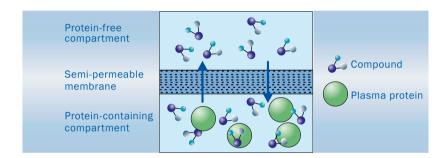
# Xpress Mini Dialyzer MD1000, sample volumes of 150 $\mu$ l – 1 ml

MWCO (kDa)	Content	Size	Cat. no.
	single dialyzer in 25 ml tubes	6 pieces	46130.01
3.5	single dialyzer in 25 ml tubes plus 6 tubes	6 pieces	46131.01
	48 single dialyzer in 48 deep well plate	1 kit	46132.01
	single dialyzer in 25 ml tubes	6 pieces	46133.01
6 - 8	single dialyzer in 25 ml tubes plus 6 tubes	6 pieces	46134.01
	48 single dialyzer in 48 deep well plate	1 kit	46135.01
	single dialyzer in 25 ml tubes	6 pieces	46136.01
12 - 14	single dialyzer in 25 ml tubes plus 6 tubes	6 pieces	46137.01
	48 single dialyzer in 48 deep well plate	1 kit	46138.01
2	single dialyzer in 25 ml tubes	6 pieces	46144.01
2	48 single dialyzer in 48 deep well plate	1 kit	46145.01
20	single dialyzer in 25 ml tubes	6 pieces	46146.01
20	48 single dialyzer in 48 deep well plate	1 kit	46147.01
140	single dialyzer in 25 ml tubes	6 pieces	46148.01
140	48 single dialyzer in 48 deep well plate	1 kit	46149.01

# C. Xpress Equilibrium Dialyzer

Equilibrium dialysis is a special dialysis method ideal for studying the binding of small molecules and ions by macromolecules. It is a simple method without the need to use fluorescent or radiolabeled tags. Simply place a receptor and a ligand on opposite sides of a semipermeable membrane. Only the ligand can pass through the membrane and redistributes between the two compartments until its concentration across the membrane is at equilibrium. If the receptor binds the

ligand, an excess of ligand will accumulate in the receptor compartment. The total ligand concentration on both sides of the membrane is measured after equilibration and the excess ligand concentration in the receptor compartment correlates with its binding to the receptor. Equilibrium dialysis provides therefore quite simply information about the stoichiometry of the ligand-macromolecule complex formed and the binding affinities of the interacting components.



The design of the ED300 Xpress Equilibrium Dialyzer is optimized for fast and easy equilibrium dialysis.

- High yield up to 98 % sample recovery
- Easy handling sample loading and retrieval with standard micropipettes
- Flexible scalable from 1 to 96 samples
- Ideally suited for dialysis in liquid handling systems



Xpress Equilibrium Dialyzer ED300

#### Xpress Equilibrium Dialyzer ED300, sample volume 50 μl – 300 μl

MWCO (kDa)	Content	Size	Cat. no.
2	12x 8-equilibrium dialyzer strips, 96 deep well plate	1 kit	46163.01
0.5	8-equilibrium dialyzer strip, detachable	8 pieces	46164.01
3.5	12x 8-equilibrium dialyzer strips, 96 deep well plate	1 kit	46165.01
6 - 8	8-equilibrium dialyzer strip, detachable	8 pieces	46166.01
0 - 8	12x 8-equilibrium dialyzer strips, 96 deep well plate	1 kit	46167.01
12 - 14	8-equilibrium dialyzer strip, detachable	8 pieces	46168.01
12 - 14	12x 8-equilibrium dialyzer strips, 96 deep well plate	1 kit	46169.01
20	12x 8-equilibrium dialyzer strips, 96 deep well plate	1 kit	46171.01
140	12x 8-equilibrium dialyzer strips, 96 deep well plate	1 kit	46173.01

# D. Xpress Dialysis Magnetic Mixing Box

All-in-one kit for accelerated dialysis. The especially designed dialysis box allows a greater buffer volume and better mixing through a magnetic stirrer bar compared to dialysis in a microtiter plate. This enables high-throughput dialysis of small sample volumes

with reduced handling and accelerated dialysis time.

Because the samples are in connection via the dialysis buffer the dialysis device is especially suitable for samples with the same or similar salt content or buffer.

Reduced handling time and accelerated dialysis speed

Each kit contains:

12 cartridges (detachable 8-micro dialyzer strip)

dialysis box, handling box

magnetic stirring bar

sealing film, self adhesive positioning bumpons

12 cartridges in handling box as refill available



#### Xpress Dialysis Magnetic Mixing Box MD100

MWCO (kDa)	Туре	Size	Cat. no.
2	Magnetic Mixing Box	1 kit	46150.01
2	Refill	1 kit	46151.01
3.5	Magnetic Mixing Box	1 kit	46152.01
5.5	Refill	1 kit	46153.01
6-8	Magnetic Mixing Box	1 kit	46154.01
0- 0	Refill	1 kit	46155.01
12 - 14	Magnetic Mixing Box	1 kit	46156.01
12 - 14	Refill	1 kit	46157.01
20	Magnetic Mixing Box	1 kit	46158.01
20	Refill	1 kit	46159.01
140	Magnetic Mixing Box	1 kit	46160.01
140	Refill	1 kit	46161.01

# **Dialysis Tubings**

For dialysis of large volumes or if costeffectiveness plays a role, dialysis tubings are still a good choice. They are made of regenerated cellulose, which is a clear, flexible and resilient dialysis membrane. Offering a good chemical compatibility, dialysis tubings made of regenerated cellulose can be used with dilute strong acids and bases, concentrated weak acids and bases, most alcohols and some mild or dilute organics, including DMSO. They resist temperatures up to 121°C and are autoclavable. SERVA offers a broad selection of molecular weight cut-offs for a wide range of applications.



# A. MEMBRA-CEL® Dialysis Membranes

- Packed dry, with glycerol as protection for embrittlement
- Contain low level of heavy metal and sulfide impurities
- Highly resistant against chemicals
- Suitable for pH range 2 12 and temperatures 4 60 °C

#### MEMBRA-Cel® Dialysis Tubing, MWCO 3500

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.	
				5 m	44310.01	
25	16	2.0	2.0	25	30 m	44310.02
				152 m	44310.03	
34	22	2.4	25	5 m	44311.01	
34	22 3.4	22 3.4 25	3.4	30 m	44311.02	

#### MEMBRA-Cel® Dialysis Tubing, MWCO 7000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)		Nominal Dry Wall Thickness (µm)	Size	Cat. no.	
25	16	2.0	28	5 m	44313.01	
25	10	2.0	20	30 m	44313.02	
34	22	2.4	20	5 m	44314.01	
34	22	3.4	22 3.4	22 3.4 30	30 m	44314.02



- Packed dry, with glycerol as protection for embrittlement
- Contain low level of heavy metal and sulfide impurities
- Highly resistant against chemicals
- Suitable for pH range 2 12 and temperatures 4 121°C

#### SERVAPOR® 3 Dialysis Tubing\*, MWCO 3500

Nominal Dry Flat Width (mm)		Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.	
25	16	2.0	20	15 m	44558.01	
25	10	2.0	10 2.0	2.0 20	30 m	44558.02
44	28	6.2	20	15 m	44559.01	
44	20	0.2	20	30 m	44559.02	
55	35	9.6	25	15 m	44560.01	

#### SERVAPOR® 6 Dialysis Tubing\*, MWCO 6000 - 8000

on the control of the							
Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.		
25	16	2.0	20	15 m	44561.01		
25	10	2.0	20	30 m	44561.02		
34	22	2.0	23	15 m	44562.01		
34	22	3.8	3.6 23	23	30 m	44562.02	
44	20	6.0	20	15 m	44563.01		
44	20 0.2 20	6.2	28 6.2	30 m	44563.02		
EE	0.5	55 05	0.6	0.5	25	15 m	44564.01
55	35	9.6	∠5	30 m	44564.02		

#### SERVAPOR® Dialysis Tubing, MWCO 12.000 - 14.000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
10	6	0.3	50	5 m	44139.01
10	0	0.5	25 m	44139.02	
34	21	3.4	25	5 m	44144.01
34	21	3.4	25	25 m	44144.02
25	16	2.0	20	5 m	44145.01
25	10	2.0	20	25 m	44145.04
45	29	6.5	20	5 m	44146.01
45	29	6.5	20	25 m	44146.04
80	50	50 405	40	5 m	44148.01
80	50 18.5 40	25 m	44148.02		

<sup>\*</sup>For protection packed in a carton with the membrane attached to the side.

Delivered with a pair free of charge dialysis membrane closures and manual.



# C. SERVAPOR® HMF Dialysis Membranes

- Highly pure membranes without any trace metals like heavy metals, sulfides
- Pre-wetted
- Ready-to-use, no soaking for removal of glycerol necessary
- Highly resistant against chemicals
- Suitable for pH range 2 12 and temperatures 4 121 °C
- Supplied either as pieces of 50 cm length packed in individual vials or 5 m rolls

#### SERVAPOR® HMF Dialysis Tubing, MWCO 1000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
25	16	2.0	20	5 vials	44576.01
25	10	2.0		10 vials	44576.02
44	28	6.2	20	5 vials	44577.01
44	28	6.2		10 vials	44577.02

#### SERVAPOR® HMF Dialysis Tubing, MWCO 2000

Nominal Dry Flat Width (mm)		Approx. Filling Volume (ml/cm)		Size	Cat. no.
25	16	2.0	20	5 vials	44578.01
25	10	2.0		10 vials	44578.02
44	28	6.2	20	5 vials	44579.01
44	28	6.2		10 vials	44579.02

#### SERVAPOR® HMF Dialysis Tubing, MWCO 3500

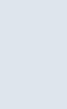
			Nominal Dry Wall Thickness (µm)	Size	Cat. no.
25	16	2.0	20	5 m	44601.01
44	28	6.2	20	5 m	44602.01

#### SERVAPOR® HMF Dialysis Tubing, MWCO 5000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
25	16	2.0	20	5 vials	44580.01
25	10	2.0	20	10 vials	44580.02
34	22	3.8	23	5 vials	44581.01
34	22	3.0		10 vials	44581.02
44	20	6.2	20	5 vials	44582.01
44	4 28			10 vials	44582.02

#### SERVAPOR® HMF Dialysis Tubing, MWCO 8000

Nominal Dry Flat Width (mm)			Nominal Dry Wall Thickness (µm)	Size	Cat. no.
25	16	2.0	20	5 m	44603.01
34	22	3.8	23	5 m	44604.01
44	28	6.2	20	5 m	44605.01
55	35	9.6	25	5 m	44606.01



## SERVAPOR® HMF Dialysis Tubing, MWCO 10.000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
10	6	0.3	51	5 m	44607.01
				5 vials	44583.01
25	16	2.0	20	10 vials	44583.02
				5 m	44584.01
			3.8 23	5 vials	44585.01
34	22	3.8		10 vials	44585.02
				5 m	44586.01
	44 28		20	5 vials	44587.01
44		6.2		10 vials	44587.02
				5 m	44588.01

# SERVAPOR® HMF Dialysis Tubing, MWCO 15.000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
				5 vials	44589.01
10	6	0.3	51	10 vials	44589.02
				5 m	44590.01
				5 vials	44591.01
25	16	2.0	20	10 vials	44591.02
				5 m	44592.01
			23	5 vials	44593.01
34	22	3.8		10 vials	44593.02
				5 m	44594.01
				5 vials	44595.01
44	28	6.2	20	10 vials	44595.02
				5 m	44596.01

# SERVAPOR® HMF Dialysis Tubing, MWCO 25.000

	,	0,			
Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
10	6	0.3	51	5 vials	44597.01
10	0		21	10 vials	44597.02
٥٢	16	2.0	20	5 vials	44598.01
25				10 vials	44598.02
34	0.0	3.8	23	5 vials	44599.01
34	22			10 vials	44599.02
4.4	20	6.2	20	5 vials	44600.01
44	28			10 vials	44600.02

# D. Spectra/Por® Dialysis Membranes

Contain low level of heavy metal and sulfide impurities

Highly resistant against chemicals

Suitable for pH range 2 - 12 and temperatures 4 - 121 °C

Spectra/Por® 1, 3 Dialysis Tubing:

Packed dry, with glycerol as protection for embrittlement

Spectra/Por® 6 Dialysis Tubing:

Pre-wetted (containing 0.1 % sodium azide)

Ready-to-use, no soaking for removal of glycerol necessary

#### Spectra/Por® 1 Dialysis Tubing, MWCO 6000 - 8000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
10	6.4	0.32	30 - 50	15 m	44170.01
23	14.6	1.7	30 - 50	30 m	44171.01
32	20.4	3.3	30 - 50	30 m	44172.01
32	20.4	3.3	30 - 30	5 m	44172.02
40	25.5	5.1	30 - 50	30 m	44173.01
50	32	7.9	30 - 50	30 m	44174.01
50	32	7.9	30 - 50	5 m	44174.02
100	64	32	70	15 m	44175.01
120	76	46	70	15 m	44176.01

#### Spectra/Por® 3 Dialysis Tubing, MWCO 3500

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
18	11.5	1 1	25 - 30	15 m	44183.01
10	11.5	1.1	25 - 30	5 m	44183.02
45	29	6.4	25 - 30	15 m	44184.01
54	34	9.3	05.00	15 m	44185.01
54	34	9.3	25 - 30	5 m	44185.02

#### Spectra/Por® 6 Dialysis Tubing, MWCO 1000

Nominal Dry Flat Width (mm)			Nominal Dry Wall Thickness (µm)	Size	Cat. no.
18	11.5	1.1	60 - 65	10 m	44192.01
38	24	4.6	60 - 65	10 m	44193.01
45	29	6.4	60 - 65	10 m	44194.01

#### Spectra/Por® 6 Dialysis Tubing, MWCO 2000

Nominal Dry Flat Width (mm)			Nominal Dry Wall Thickness (µm)	Size	Cat. no.
18	11.5	1.1	60 - 65	10 m	44196.01
38	24	4.6	60 - 65	10 m	44197.01
45	29	6.4	60 - 65	10 m	44198.01

#### Spectra/Por® 6 Dialysis Tubing, MWCO 3500

Nominal Dry Flat Width (mm)			Nominal Dry Wall Thickness (µm)	Size	Cat. no.
18	11.5	1.1	60 - 65	10 m	44199.01
45	29	6.4	60 - 65	10 m	44200.01
54	34	9.3	60 - 65	10 m	44201.01

# Spectra/Por® 6 Dialysis Tubing, MWCO 8000

No. of the Elect	No of the I	A F:111	N	0:	0.1
Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
8	5.1	0.20	60 - 65	10 m	44202.01
12	7.5	0.45	60 - 65	10 m	44203.01
18	11.5	1.1	60 - 65	10 m	44204.01
24	15	1.8	60 - 65	10 m	44205.01
32	20.4	3.3	60 - 65	10 m	44206.01
40	25.5	5.1	60 - 65	10 m	44207.01
50	32	7.9	60 - 65	10 m	44208.01

## Spectra/Por® 6 Dialysis Tubing, MWCO 10.000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
8	5.1	0.20	60 - 65	10 m	44209.01
12	7.5	0.45	60 - 65	10 m	44210.01
18	11.5	1.1	60 - 65	10 m	44211.01
24	15	1.8	60 - 65	<b>10</b> m	44212.01
32	20.4	3.3	60 - 65	<b>10</b> m	44213.01
45	29	6.4	60 - 65	10 m	44214.01

## Spectra/Por® 6 Dialysis Tubing, MWCO 15.000

Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
8	5.1	0.20	60 - 65	10 m	44215.01
12	7.5	0.45	60 - 65	10 m	44216.01
18	11.5	1.1	60 - 65	10 m	44217.01
24	15	1.8	60 - 65	10 m	44218.01
32	20.4	3.3	60 - 65	10 m	44219.01
45	29	6.4	60 - 65	10 m	44220.01

# Spectra/Por® 6 Dialysis Tubing, MWCO 25.000

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Nominal Dry Flat Width (mm)	Nominal Dry Diameter (mm)	Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat.no.
8	5.1	0.20	60 - 65	10 m	44221.01
12	7.5	0.45	60 - 65	10 m	44222.01
18	11.5	1.1	60 - 65	10 m	44223.01
24	15	1.8	60 - 65	10 m	44224.01
28	18	2.5	60 - 65	10 m	44225.01
34	22	3.7	60 - 65	<b>10</b> m	44226.01

# Spectra/Por® 6 Dialysis Tubing, MWCO 50.000

Nominal Dry Flat Width (mm)		Approx. Filling Volume (ml/cm)	Nominal Dry Wall Thickness (µm)	Size	Cat. no.
10	6.4	0.32	60 - 65	10 m	44227.01
12	7.5	0.45	60 - 65	10 m	44228.01
28	18	2.5	60 - 65	10 m	44229.01
34	22	3.7	60 - 65	10 m	44230.01

# E. SERVAPOR® Closures

**SERVAPOR® Closures**, are a reliable seal for all dialysis tubing types and thicknesses. It is recommended to select closures with a sealing width 4 to 10 mm longer than the flat width of the dialysis

tubing. This assures a leak-proof seal without the risk of membrane tearing. Closures are made from polyamide, autoclavable and do not float.



Reliable, leak-proof seal

Autoclavable

#### Closures

Width	Size	Cat. no.
SERVAPOR® Closure, 50 mm	10 pieces	44608.01
SERVAPOR® Closure, 70 mm	10 pieces	44609.01
SERVAPOR® Closure, 110 mm	10 pieces	44610.01

# SERVA

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