PALL Laboratory



# Simplifying Sample Prep for Research Laboratories

Products for molecular purification and characterization, media prep, analytical chemistry and microbiology

Filtration. Separation. Solution.sm

# Simplifying Sample Prep

Pall Laboratories develops and produces many different membrane chemistries and devices for a multitude of applications.

This brochure will help you select from molecular purification and characterization, media prep, analytical chemistry and microbiology products designed to maximize processing accuracy and speed. Many other products are also available. Visit pall.com/lab for more product information.

# Sterile Acrodisc<sup>®</sup> Syringe Filters Superior flow rate and higher throughput than competitive devices

- Low extractables/surfactant-free, inherently hydrophilic membrane for reliable performance
- Low protein binding to minimize sample loss
- Available with built-in prefilter for increased throughput of difficult-to-filter liquids (heavy particulate load)
- Easy to use luer lock fittings
- Available in a variety of sizes to accomodate volumes from 10 - 150 mL
- Sterilized by gamma irradiation to eliminate potential contamination by EtO residuals

### **Applications**

- Filtration of cell and tissue culture media and additives
- Clarification of biological fluid, protein, enzyme, probe and hybridization buffers, and other aqueous samples
- Filtration of aqueous solutions
- Filtration where low protein binding is desired
- ▶ For cell cryopreservation, use DMSO-safe Acrodisc syringe filters.



#### **Ordering Information**

#### Acrodisc Syringe Filters With Supor® (Polyethersulfone) Membrane

Part Number	Description	Pkg
4602	0.2 µm, 13 mm	75/pkg
4604	0.45 µm, 13 mm	75/pkg
4612	0.2 µm, 25 mm	50/pkg
4614	0.45 µm, 25 mm	50/pkg
4187	0.8/0.2 µm, 25 mm	50/pkg
4652	0.2 µm, 32 mm	50/pkg
4654	0.45 µm, 32 mm	50/pkg
4658	0.8/0.2 µm, 32 mm	50/pkg
4650	5 µm, 32 mm	50/pkg

#### Serum Acrodisc Syringe Filter With Supor Membrane

Part		
Number	Description	Pkg
4525	Glass fiber/0.2 µm, 37 mm	20/pkg

#### DMSO-Safe Acrodisc Syringe Filter

Part		
Number	Description	Pkg
4433	0.2 µm Nylon membrane, 25 mm	50/pkg

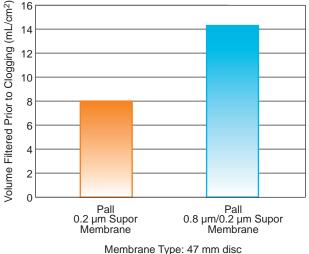
# AcroPak™ 20 Filters and AcroPak 200 Capsules with Supor Membrane

Built in pre-filter for fast and efficient processing

- Low extractables/surfactant-free Supor polyethersulfone membrane has high flow rates, high throughputs and low protein binding
- Built-in prefilter layering, 0.8 / 0.2 µm, extends filter life for particulate-laden solutions such as serum-containing media
- Process up to 2 L with Acropak 20 and up to 20 L with Acropak 200
- Tapered hose barb inlet to attach easily to pressurized systems or peristaltic pump
- Upstream vent to prevent vapor lock

# Applications

- Small to medium volume sterile filtration of fluids containing dilute proteins, preservatives, or other critical components
- Filtration of cell and tissue culture media and additives
- Ideal for filtration of aqueous buffers and cell culture media
- Point-of-use filtration of lab water



Throughput determined using 2.5% TSB.



# **Ordering Information**

#### Acropak 20 Filter with Supor Membrane

Part		
Number	Description	Pkg
12203	0.8 / 0.2 µm, gamma irradiated, with filling bell	3/pkg

#### Acropak 200 Filter with Supor Membrane

Description	Pkg
0.8 / 0.2 µm, gamma irradiated, with filling bell	3/pkg
	<b>Description</b> 0.8 / 0.2 µm, gamma irradiated, with filling bell

# VacuCap<sup>®</sup> Vacuum Filtration Devices

Innovative bottle-top filters can fill multiple bottles with one device

- Ability to process 100 mL to 5L volumes into multiple aliquots
- Reduces storage space and waste
- Environmentally-friendly with minimal plastic waste
- > Draws directly from the mixing reservoir
- Eliminates possibility of contamination from transfer steps by filtering directly into sterile container
- Low extractables/surfactant-free Supor membrane provides high flow rates
- Available with built-in prefilter to prevent clogging and to increase throughput of high-particulate solutions

# Applications

- Vacuum-driven filtration of cell and tissue culture media, microbiological media, aqueous solutions, protein solutions, and buffers
- Prefiltration or clarification of aqueous solutions
- > PF version useful for filtration of hard-to-filter solutions.



# Instructions



1. Connect the feed tubing to the port marked "INLET" on the VacuCap device. Place the opposite end of the tubing in the unfiltered fluid to be drawn.



2. Connect the vacuum tubing to the port marked "VACUUM" on the VacuCap device. Refer to product insert for safety precautions.



 While holding the VacuCap device securely on the filtrate container, start the vacuum. The VacuCap device will seal securely to the container top and fluid will be drawn.

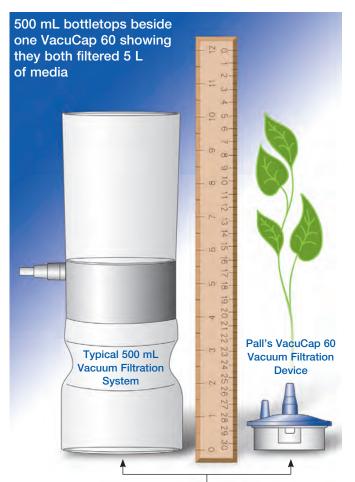


4. When filtration is complete, switch off the vacuum pump allowing the vacuum inside the receiving container to dissipate. Refer to the product insert for complete instructions.



### Process More per Unit and Reduce Plastics Waste

Reduce storage needs while reducing waste cost compared with typical vacuum filtration system



Devices shown in this comparison can filter equivalent volumes.

Product rendering and ruler have been reduced.

## **Ordering Information**

VacuCap 60 Devices, Gamma Irradiated (100 mL - 1 L)

Part Number	Description	Dire
Number	Description	Pkg
4631	0.1 µm, 60 mm	10/pkg
4632	0.2 μm, 60 mm	10/pkg
4634	0.45 µm, 60 mm	10/pkg
4638	0.8/0.2 µm, 60 mm	10/pkg
TA4632	0.2 µm, 60 mm (with individually attached tubing)	10/pkg

#### VacuCap 90 Devices, Gamma Irradiated (1 L - 5 L)

Part Number	Description	Pkg
4621	0.1 μm, 90 mm	10/pkg
4622	0.2 μm, 90 mm	10/pkg
4624	0.45 μm, 90 mm	10/pkg
4628	0.8/0.2 µm, 90 mm	10/pkg
TA4622	0.2 µm, 90 mm (with indivually attached tubing)	10/pkg

Visit www.pall.com/lab for additional part numbers, sizes, and pricing.

\* Always use bottles designed for use with vacuum.

# Centrifugal Filtration Devices

Ensure rapid processing of samples with typical recoveries greater than 90%

## Nanosep®

 Simple, reliable concentrating and desalting of 50 to 500 µL samples

### Microsep<sup>™</sup> Advance

 Confidence in rapid recovery of <100 µL volumes of concentrate from starting volumes up to 5 mL

### Macrosep<sup>®</sup> Advance

 Quickly concentrates up to 20 mL of biological sample without valuable sample loss

### **Application**

#### For use of proteins and nucleic acids

- Concentration
- Buffer exchange
- De-salting
- Fractionation



# **Ordering Information**

#### Nanosep Centrifugal Devices

Part Number	Description	Pkg
0D003C33	3K, gray	24/pkg
0D010C33	10K, blue	24/pkg
0D030C33	30K, red	24/pkg
OD100C33	100K, clear	24/pkg

#### Microsep Advance Centrifugal Devices

Part Number	Description	Pkg
MCP001C41	1K, yellow	24/pkg
MCP003C41	3K, gray	24/pkg
MCP010C41	10K, blue	24/pkg
MCP030C41	30K, red	24/pkg
MCP100C41	100K, clear	24/pkg

#### Macrosep Advance Centrifugal Devices

Part Number	Description	Pkg
MAP001C37	1K, yellow	24/pkg
MAP003C37	3K, gray	24/pkg
MAP010C37	10K, blue	24/pkg
MAP030C37	30K, red	24/pkg
MAP100C37	100K, clear	24/pkg

Visit www.pall.com/lab for additional part numbers, sizes, and pricing.



# **Concentration Selection Guide**

#### Nanosep and Microsep Advance Centrifugal Devices

The Nanosep and Microsep concentration selection guides are meant to serve as a recommendation for concentrating protein samples. The total volume of liquid in the device determines the final retentate volume. By adding buffer under the device insert, you can set your dead stop volume and thereby select the concentration factor.

#### Nanosep Centrifugal Device

Concentration selection guide for Nanosep Centrifugal Devices

Concentration Factor (Fold)	Starting Sample Volume (µL)	Volume Added to Collection Tube (µL)	Final Rententate Volume (µL)
2	200	572	100
3	200	530	67
4	200	508	50
5	200	496	40
6	200	487	33
10	200	470	20
20	200	470	10
25	200	455	8

The above table shows what buffer volume should be added to the collection tube under the insert to achieve desired concentration factors for 200, 300 and 400  $\mu$ L starting sample volumes in the insert.

For instance, if you would like to concentrate 200  $\mu$ L of starting material by ten-fold (see highlight in table), the buffer volume to be added to the collection tube would be 470  $\mu$ L, leaving 20  $\mu$ L of concentrated material in the retentate. For the complete Concentration Selection Guide visit: www.pall.com/lab.

### **MWCO Selection Guide**

#### **MWCO Selection for Protein Applications**

MWCO	Biomolecule Molecular Weight	MWCO	Base Pairs (DS)	Bases (SS)
1K, yellow	3K-10K	1K, yellow	5-16 Bp	9-32 Bs
3K, gray	10K-20K	3K, gray	16-32 Bp	32-65 Bs
10K, blue	30K-90K	10K, blue	50-145 Bp	95-285 Bs
30K, red	90K-180K	30K, red	145-285 Bp	285-570 Bs
100K, clear	300K-900K	100K, clear	475-1,450 Bp	950-2,900 Bs

#### Microsep Advance Centrifugal Device

Concentration selection guide for Microsep Advance Centrifugal Devices

Concentration Factor (Fold)	Starting Sample Volume (mL)	Volume Added to Collection Tube (mL)	Final Rententate Volume (mL)
2	3.00	6.69	1.50
3	3.00	5.76	1.00
4	3.00	5.29	0.75
5	3.00	5.02	0.60
6	3.00	4.83	0.50
10	3.00	4.46	0.30
20	3.00	4.18	0.15
25	3.00	4.12	0.12

The above table shows what buffer volume should be added to the collection tube under the insert to achieve desired concentration factors for 3, 4 and 5 mL starting sample volumes in the insert.

**MWCO Selection for Nucleic Acid Applications** 

# AcroPrep<sup>™</sup> Advance Filter Plates

# For high throughput sample prep and detection procedures

- Provides consistency in filtration times, as well as efficient sample and bead recovery
- Available in a variety of membrane configurations, plate colors, well volumes, and outlet tip lengths
- Plates are constructed from chemically-resistant, biologically-inert polypropylene
- Serialized barcode label allows for use in automated tracking systems

# Applications

- Concentration, purification, and desalting of proteins and peptides
- Bead-/resin-based applications
- Gross fractionation and lysate clarification
- > pDNA, gDNA, and total RNA purification
- General filtration

### Ordering Information and Applications

# Concentration, Buffer Exchange, Desalting of Proteins and Peptides and Nucleic Acids

Description	Pkg
350 μL, 96-Well, Omega 3K MWCO	10/pkg
350 μL, 96-Well, Omega 10K MWCO	10/pkg
350 μL, 96-Well, Omega 30K MWCO	10/pkg
350 μL, 96-Well, Omega 100K MWCO	10/pkg
1 mL, 96-Well, Omega 3K MWCO	5/pkg
1 mL, 96-Well, Omega 10K MWCO	5/pkg
1 mL, 96-Well, Omega 30K MWCO	5/pkg
1 mL, 96-Well, Omega 100K MWCO	5/pkg
100 µL, 384-Well, Omega 10K MWCO, long tips	10/pk
100 μL, 384-Well, Omega 10K MWCO	10/pkg
100 µL, 384-Well, Omega 30K MWCO, long tips	10/pkg
100 μL, 384-Well, Omega 30K MWCO	10/pkg
100 μL, 384-Well, Omega 100K MWCO, long tips	10/pkg
100 µL, 384-Well, Omega 100K MWCO	10/pkg
	350 μL, 96-Well, Omega 3K MWCO           350 μL, 96-Well, Omega 10K MWCO           350 μL, 96-Well, Omega 30K MWCO           350 μL, 96-Well, Omega 30K MWCO           350 μL, 96-Well, Omega 100K MWCO           1 mL, 96-Well, Omega 3K MWCO           1 mL, 96-Well, Omega 3K MWCO           1 mL, 96-Well, Omega 30K MWCO           1 mL, 96-Well, Omega 30K MWCO           1 mL, 96-Well, Omega 100K MWCO           1 mL, 96-Well, Omega 100K MWCO           100 μL, 384-Well, Omega 10K MWCO, long tips           100 μL, 384-Well, Omega 30K MWCO, long tips           100 μL, 384-Well, Omega 100K MWCO, long tips

#### **Bead-/Resin-Based Applications**

Part Number	Description	Pkg
8027	350 μL, 96-Well, 30-40 μm PP/PE	10/pkg
	non-woven media	
8049	350 µL, 96-Well, for multiplex assays	10/pkg

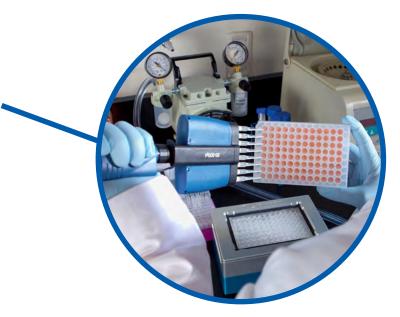
#### Gross Fractionation and General Filtration

Description	Pkg
1 mL, 96-Well, 0.2 µm Supor membrane	5/pkg
1 mL, 96-Well, 0.45 µm Supor membrane	5/pkg
1 mL, 96-Well, 1.2 µm Supor membrane	5/pkg
	1 mL, 96-Well, 0.2 µm Supor membrane 1 mL, 96-Well, 0.45 µm Supor membrane

#### Lysate Clarification

Part Number	Description	Pkg
8075	350 μL, 96-Well, 3 μm glass fiber/0.2 μm Supor membrane	10/pkg
8040	350 μL, 96-Well, 3 μm glass fiber/1.2 μm Supor membrane	10/pkg
8175	1 mL, 96-Well, 3 μm glass fiber/0.2 μm Supor membrane	5/pkg
8275	2 mL, 96-Well, 3 μm glass fiber/0.2 μm Supor membrane	5/pkg





### Nucleic Acid Binding

Part Number	Description	Pkg
5072	100 μL, 384-Well, 1 μm glass fiber media, long tips	10/pkg
8133	1 mL, 96-Well, for Nucleic Acid Binding, long tips	5/pkg

# Ordering Information (continued)

### Solvent Filtration

Part Number	Description	Pkg
5070	100 μL, 384-Well, 0.45 μm GHP membrane, long tips	10/pkg
5071	100 µL, 384-Well, 0.45 µm GHP membrane	10/pkg
8082	350 μL, 96-Well, 0.2 μm GHP membrane	10/pkg
8084	350 μL, 96-Well, 0.45 μm GHP membrane	10/pkg
8182	1 mL, 96-Well, 0.2 µm GHP membrane	5/pkg
8184	1 mL, 96-Well, 0.45 µm GHP membrane	5/pkg
8282	2 mL, 96-Well, 0.2 µm GHP membrane	5/pkg
8284	2 mL, 96-Well, 0.45 µm GHP membrane	5/pkg



# Minimate™ Tangential Flow Filtration System

Streamline laboratory-scale concentration, desalting, and buffer exchange processes



- System's plug-n-play design includes all the hardware, tubing, and fittings needed to get your TFF process up and running quickly
- Concentration and diafiltration processes can be performed on the same system with minimal user intervention
- Cost-effective design easy to clean and reuse

### **Applications**

- Concentrate and desalt proteins, peptides, or nucleic acids (DNA, RNA, oligonucleotides)
- Recover antibodies or recombinant proteins from clarified cell culture media
- > Separate (fractionate) large from small biomolecules
- Concentrate viruses or gene therapy vectors
- Prepare samples prior to column chromatography

# **Ordering Information**

#### Minimate TFF System

Part Number	Description	Pkg
OAPMP110	115 V AC 50/60 Hz, includes peristalic pump, pump head, pressure gauge, reservoir, stir plate, drip tray, and assorted fittings	1/pkg

#### Minimate TFF Capsules With Omega<sup>™</sup> Membrane

Part Number	Description (MWCO)	Pkg
0AD65C12	650D	1/pkg
0A001C12	1K	1/pkg
0A003C12	<u>3K</u>	1/pkg
0A005C12	5K	1/pkg
0A010C12	10K	1/pkg
0A030C12	30K	1/pkg
0A050C12	50K	1/pkg
0A070C12	70K	1/pkg
0A100C12	100K	1/pkg
0A300C12	300K	1/pkg
0A500C12	500K	1/pkg
0A990C12	1000K	1/pkg

Visit www.pall.com/lab for additional part numbers, sizes, and pricing.





# FluoroTrans PVDF, FluoroTrans<sup>®</sup> W PVDF,

# BioTrace NT, and Biodyne<sup>®</sup> Transfer Membranes

Membranes for transfer and immobilization

### FluoroTrans PVDF, FluoroTrans W PVDF (Hydrophobic Polyvinylidene Fluoride) Transfer Membranes

- Optimized for Western blotting applications
- Sensitive protein detection with low background and very low protein burnthrough
- High tensile strength

## BioTrace NT (Nitrocellulose)Transfer Membranes

- 100% pure nitrocellulose, no support fabrics to interfere with signal generation
- High binding capacity for proteins and nucleic acids
- Lower protein burnthrough than competitors in electrophoretic transfers

# Biodyne (Nylon) Transfer Membranes

- Will not crack, shrink, or tear when subjected to multiple cycles of hybridization, stripping, and reprobing
- Superior performance with radioactive (Biodyne B) and non-radioactive (Biodyne A) detection systems

# Applications

- FluoroTrans W PVDF membrane is ideal for Western transfers, protein dot blots, and protein sequencing
- Use BioTrace NT membrane for colony/plaque lifts and protein transfers
- Biodyne membranes are suitable for nucleic acid applications, as well as applications requiring enhanced detection and resolution

### Performance

# FluoroTrans Membrane Has Excellent Sensitivity, Signal, and Background in Western Transfers



Rabbit reticulocyte lysate (Amersham) was loaded in lanes of polyacrylamide gels at f.s., 1/3 and 1/10 dilutions. After electrophoresis, proteins were transferred to membranes. Membranes were stained with 0.1% Amido Black, 45% methanol, and 2% acetic acid for 4 minutes; then destained for 5 minutes with two changes of 90% methanol and 2% acetic acid. Stained membranes were rinsed in water and air dried.

# **Ordering Information**

#### FluoroTrans PVDF Transfer Membrane

Part Number	Description	Pkg
PVM020C-160	7 x 8.4 cm sheets	10/pkg
PVM020C-195	8.5 x 9 cm sheets	20/pkg
PVM020C-196	13 x 14 cm sheets	10/pkg
PVM020C-099	26 cm x 3.3 m roll	1/pkg

#### FluoroTrans W PVDF Transfer Membrane

BSP0158	7 x 9 cm sheets	10/pkg
BSP0157	10 x 15 cm sheets	10/pkg
BSP0159	20 x 20 cm sheets	10/pkg
BSP0161	26 cm x 3.3 m roll	1/pkg

#### BioTrace NT Nitrocellulose Transfer Membrane

66489	20 x 20 cm sheets	10/pkg
66485	30 cm x 3 m roll	1/pkg

#### Biodyne A (Nylon) Membrane, 0.45 µm

60106	30 cm x 3 m roll	1/pkg

#### Biodyne B (Nylon) Membrane, 0.45 µm

60200	20 x 20 cm sheets	10/pkg
60207	30 cm x 3 m roll	1/pkg

#### Biodyne C (Nylon) Membrane, 0.45 µm

10/pkg

#### Biodyne Plus (Nylon) Membrane, 0.45 µm

60400	20 x 20 cm sheets	10/pkg
60406	30 cm x 3 m roll	1/pkg

# Vent Devices

# Protect your cell culture and lab environment

- Designed to protect bioreactors, fermentation tanks, culture vessels, and carboy contents from external contamination and to protect the environment from contaminants within the vessel
- Self-contained, compact filter devices provide high efficiency removal of airborne bacteria and particulate under dry or moist conditions
- Vacushield<sup>™</sup> vent devices should be used between pump and receiving vessels to protect the valves and pump components from damage by aqueous solutions and to prolong the life of the pump
- Always select a filter with a sufficient air flow rate to accommodate the air flow required by each application.

### **Applications**

- Bioreactors
- Fermentation tanks
- Isolation or environmental chambers
- Receiving vessels
- Carboys
- Other small containers



# **Ordering Information**

#### Acro<sup>®</sup> 37 TF Vent Device

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Number	Description	Pkg
4464	0.2 µm PTFE membrane, 37 mm	24/pkg
4465	0.2 µm PTFE membrane, 37 mm	200/pkg

#### **Bacterial Air Vents**

Part Number	Description	Pkg
4210	1 μm (nominal) glass, 37 mm	24/pkg
4308	1 μm (nominal) glass, 37 mm, gamma-irradiated	10/pkg

#### Acro 50 Vent Devices With PTFE Membrane

Part Number	Description	Pkg
4251	0.2 µm, hose barb	18/pkg
4256	0.45 µm, hose barb	18/pkg
4258	1 µm, hose barb	18/pkg
4003	1 μm, 1/8 in. MNPT	18/pkg

#### Acro 50 Vent Devices With Emflon® II Membrane

Part Number	Description	Pkg
A50V002P2	0.2 µm hydrophobic PVDF membrane, 50 mm	3/pkg

#### Vacushield Vent Device

Part Number	Description	Pkg
4402	50 mm, hose barb	3/pkg

Visit www.pall.com/lab for additional part numbers, sizes, and pricing.



# Acrodisc Syringe Filters with GHP Membrane

Universal filter for both organic and aqueous solutions in HPLC and UHPLC sample prep

- Versatile GHP (hydrophilic polypropylene) membrane for aqueous and aggressive organic solvent-based solutions
- Eliminates membrane selection process with universal membrane
- Reduces time for method validation with higher analyte recoveries
- Acrodisc PSF syringe filters with GHP membrane extend HPLC column life up to 46 times
- Certified low levels of UV-absorbing extractables for accurate analysis for HPLC/UHPLC
- Easy filtration of particulate-laden samples with glass fiber prefilter version
- 13 mm Acrodisc syringe filter with minispike configuration offers low hold-up and easy filtration into autosampler vials



### **Applications**

- Highly recommended for filtering HPLC/UHPLC samples and mobile phases
- The Acrodisc PSF GxF syringe filter provides two to four times the throughput of standard prefilter devices for extremely viscous samples

### **Ordering Information**

# Acrodisc Syringe Filters With GHP Membrane, 13 mm

Dort

Number	Description	Pkg
4554	0.2 µm, minispike outlet	100/pkg, 300/cs
4556	0.45 µm, minispike outlet	100/pkg, 300/cs

# Acrodisc PSF Syringe Filters With GHP Membrane, 25 mm

Part

Part Number	Description	Pkg
AP-4564	0.2 μm	50/pkg, 200/cs
AP-4560	0.45 μm	50/pkg, 200/cs
AP-4307	GxF/0.2 μm	50/pkg, 200/cs
AP-4559	GxF/0.45 μm	50/pkg, 200/cs

# Solvac<sup>®</sup> Filter Holder

Simplifies clean-up and degassing of mobile phase solvents and other solutions

# Applications

- Remove contaminating particulate from mobile phase or other solutions
- De-gas mobile phase solvents and solutions
- Eliminate pour-and-wait filtration

### **Benefits**

- Versatile design fits most HPLC bottles, flasks, and containers, and eliminates the added steps of washing flasks and transferring mobile phase solvent from flask to reservoir
- Draws directly from HPLC solvent bottle. Less likely to spill aggressive solvents than glass funnels or disposable cups.



# **Ordering Information**

Acrodisc Syringe Filters With GHP Membrane, 13 mm

Part Number	Description	Pkg
4020	SolVac holder with 61 cm (2 ft.) feedline tubing, thumb clamp, sinker, vacuum port adapter, 2 membrane seal gaskets, and 2 seal gaskets	1/pkg

# HPLC Mobile Phase Filtration Membranes

Membranes designed for the stringent requirements of mobile phase filtration

# **Applications**

- Remove contaminating particulate from mobile phase or other solutions
- De-gas mobile phase solvents and solutions
- Eliminate pour-and-wait filtration

### **Benefits**

- Membranes are identical in composition and quality to those used in Pall's HPLC-certified Acrodisc syringe filters
- HPLC certification assures that the filters will not add artifacts to your analysis
- GH Polypro membrane is the best choice for filtering mobile phases

# **Ordering Information**

#### HPLC Mobile Phase Filtration Membranes, 47 mm

Part Number	Description	Pkg
66557	0.2 µm, GH Polypro (PP) membrane	100/pkg
66548	0.45 µm, GH Polypro (PP) membrane	100/pkg
66143	0.2 µm, TF (PTFE) membrane	100/pkg
66149	0.45 µm, TF (PTFE) membrane	100/pkg
66602	0.2 µm, Nylaflo (Nylon) membrane	100/pkg
66608	0.45 µm, Nylaflo (Nylon) membrane	100/pkg



# Acrodisc<sup>®</sup> MS Syringe Filter Certified Syringe Filters for LCMS

- LCMS (Liquid Chromatography Mass Spectrometry) certified – Minimize interference in your LCMS results with the Acrodisc MS syringe filter. The first LCMS certified filter with extremely low levels of extractables.
- Low ion suppression/enhancement Reduce the need for retesting. The Acrodisc MS syringe filters will not contribute extractables that will interfere with the ionization process, which is the heart of the LCMS technique.
- Protective packaging design Save money and prevent downtime due to accidental contamination. Acrodisc MS syringe filters are packaged into separate tubes to protect them from external sources of extractables. While one tube is in use, the others are kept sealed.
- Excellent chemical resistance Use this universal filter for all your LCMS samples. The WWPTFE (water wettable polytetrafluoroethylene) membrane can be used with both organic and aqueous solvents. When coupled with a polyethylene housing, the membrane offers excellent chemical resistance.
- Low protein binding Get accurate and confident quantitative results. There is minimal protein adsorption with the Acrodisc MS syringe filters.
- Particulate retention Using Acrodisc MS syringe filters will protect your columns and instrument from particulate build-up, making your columns last longer and your LCMS perform more consistently.

### **Applications**

The Acrodiscs MS syringe filter has been developed specifically for LCMS sample prep applications, such as:

- Molecular identification
- Structural determination
- Pharmacokinetics
- Drug discovery and development
- Drug testing
- Environmental monitoring
- Food safety monitoring
- Oil composition determination

### **Ordering Information**

#### Acrodisc MS Syringe Filter

Part Number	Description	Pkg
MS-3301	0.2 µm, 13 mm, WWPTFE membrane	60/pkg



# Sentino<sup>®</sup> Microbiology System

Maximize workspace and minimize contamination risk

The Sentino Microbiology System offers a mix-and-match selection of products to best suit the economic, ergonomic and workflow needs in a busy microbiology laboratory. The collection of complimentary products are targeted for evaluating microbial contamination in aqueous samples using MF Technique. Select the items that best fit the needs in your laboratory. Choose disposable filter funnels and our Sentino Pump or pair the pump with our Sentino Filter Dispenser with individual membrane filters aseptically dispensed at the press of a button. The compact design of the Sentino Microbiology System frees valuable bench top space and provides flexibility in arranging workspace for optimal efficiency and workflow.

# Applications

Membrane Filter (MF) Technique for analyzing aqueous samples for microbial contamination:

- Municipal and environmental water analysis
- Water system monitoring
- Beverage monitoring
- > Pharmaceutical and personal care products quality control

### Accessories

#### Sentino Microbiology Pump

Maximize workspace and minimize contamination risk



Sentino Filter Dispenser Offers a simple design with a reliable dispense



#### **MicroFunnel Filter Funnels**

Widest selection of easy to use, disposable filter funnels for microbiological analysis.



#### Sentino Microcheck II Beverage Monitors

Easy-to-use disposable filter funnel to meet microbial analysis needs for beverage



#### Sentino Magnetic Filter Funnels

Unique magnetic seal allows easy, one-handed vacuum filtration of liquids



Pall Laboratory Manifold Most convenient way to filter multiple samples



# **Ordering Information**

#### Sentino Microbiology Pump

Part Number	Description	Pkg
13186	<ul> <li>(1) power transformer (1) power cord</li> <li>with NEMA 5-15P plug (1) European</li> <li>power cord with CEE 7/7 plug</li> <li>(1) UK power cord with BS1363 plug</li> </ul>	1/pkg

#### Sentino Filter Dispenser

Part Number	Description	Pkg
13184	<ol> <li>power transformer, (1) power cord with NEMA 5-15P plug, (1) European power cord with CEE 7/7 plug,</li> <li>UK power cord with BS1363 plugplug,(1) User Guide CD</li> </ol>	1/pkg

#### MicroFunnel<sup>™</sup> Filter Funnels, 100 mL

Part Number	Description	Pkg
4800	MicroFunnel unit with 0.45 µm GN-6 Metricel® membrane, white, gridded, individually bagged	50/pkg
4803	MicroFunnel unit with 0.2 μm Supor <sup>®</sup> membrane, white, gridded, individually bagged	50/pkg
4852	MicroFunnel unit with 0.45 μm Supor membrane, white, gridded, individually bagged	50/pkg
4805	MicroFunnel unit with 0.45 µm Metricel Black membrane, black, gridded, individually bagged	50/pkg

#### MicroFunnel Filter Funnels, 300 mL

Part Number	Description	Pkg
4815	MicroFunnel 300 unit with 0.45 µm GN-6 Metricel membrane, white, gridded, individually bagged	20/pkg
4818	MicroFunnel 300 unit with 0.2 µm Supor membrane, white, gridded, individually bagged	20/pkg
4828	MicroFunnel 300 unit with 0.45 μm Supor membrane, white, gridded, individually bagged	20/pkg

# MicroFunnel Plus Filter Funnels, 300 mL, Gamma Irradiated

Part Number	Description	Pkg
4809	0.2 μm Supor membrane, white, gridded, individually bagged	50/pkg
4823	0.45 µm Supor membrane, white, gridded, individually bagged	50/pkg

## MicroCheck<sup>®</sup> II Beverage Monitors

Part Number	Description	Pkg
4761	GN-6 Metricel membrane, 0.45 µm, white with grid lines, 100 mL capacity	50/box
4762	GN-4 Metricel membrane, 0.8 μm, white with grid lines, 100 mL capacity	50/box
4763	Metricel Black membrane, 0.45 μm, black with grid lines, 100 mL capacity	50/box
4764	Metricel Black membrane, 0.8 µm, black with grid lines, 100 mL capacity	50/box

# Sentino Microbiology System (continued)

## Ordering Information (continued)

#### Sentino Magnetic Filter Funnel

Part Number	Description	Pkg
4271	Filter Funnel Assembly 47mm	150 mL
4273	Filter Funnel Assembly 47mm	300 mL

#### **Sentino Filter Funnels**

Part Number	Description	Pkg
4870	Sentino Filter Funnels 100 mL	80/case
4871	Sentino Filter Funnels 250 mL	100/case

#### Pall Manifold

Part Number	Description	Pkg
4889	Manifold Base, 3 place, 3 Manifold Valves, 1 End Cap, 1 Hose Barb Cap	1/pkg
4890	MicroFunnel Adapter	3/pkg
4891	Sentino Funnel Adapter	3/pkg
4892	Standard Adapter	3/pkg
4893	Coupling Device for Manifold	1/pkg
4959	Elongated Standard Adapter	3/pkg
4959	Elongated Standard Adapter	3/pkg

#### **Accessories and Replacement Parts**

Part Number	Description	Pkg
4878	Spare O-ring Kit	1/pkg
4894	Manifold Valves	1/pkg

#### **Stainless Steel Forceps**

Part Number	Description	Pkg
51147	Black grips	1/pkg
4690	Multi-colored grips	3/pkg

#### 47 mm Magnetic Filter Funnels

Number	Description	Pkg
4247	150 mL capacity	1/pkg
4242	300 mL capacity	1/pkg
4241	300 mL capacity with lid	1/pkg

#### **Dispenser Pack Refills**

Pall		
Part No.	Description	Pkg
68123	0.2 µm, Supor membrane	1000/pkg
68121	0.45 µm, GN-6 Metricel membrane	1000/pkg
68124	0.45 µm, Metricel Black membrane	1000/pkg
68125	0.8 µm, Metricel Black membrane	1000/pkg





# Notes





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