

# HPLC Mobile Phase Filtration Membranes

Membranes designed specifically for the stringent requirements of mobile phase filtration



- ▶ 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.
- ▶ PTFE membrane provides the ultimate in chemical compatibility for filtering harsh chemicals and HPLC mobile phases.

## Applications

- ▶ Purification and degassing of mobile phase solvents used in liquid chromatography applications.

## Specifications

### Filter Media

GH Polypro (GHP, hydrophilic polypropylene), TF (PTFE, hydrophobic polytetrafluoroethylene), PVDF (hydrophilic polyvinylidene fluoride), and Nylaflo™ (hydrophilic nylon) membranes

### Pore Size

0.2 and 0.45 µm

### Typical Thickness

#### GHP Membrane

0.2 µm: 101 µm (4.0 mils)  
0.45 µm: 114 µm (4.5 mils)

#### TF (PTFE) Membrane

0.2 µm: 139 µm (5.5 mils)  
0.45 µm: 135 µm (5.3 mils)

#### PVDF Membrane

0.2 µm: 140 µm (5.5 mils)  
0.45 µm: 127 µm (5.0 mils)

#### Nylaflo Membrane

0.2 and 0.45 µm: 127 µm (5.0 mils)

### Maximum Operating Temperature

GHP Membrane  
55 °C (131 °F)

PVDF, TF (PTFE), and  
Nylaflo Membranes  
100 °C (212 °F)

### Minimum Bubble Point – Water

GHP Membrane  
0.2 µm: 2.9 bar (290 kPa, 42 psi)  
0.45 µm: 1.38 bar (138 kPa, 20 psi)

#### PVDF Membrane

0.2 µm: 2.3 bar (230 kPa, 34 psi)  
0.45 µm: 1.1 bar (110 kPa, 16 psi)

#### Nylaflo Membrane

0.2 µm: 3.4 bar (340 kPa, 49 psi)  
0.45 µm: 2.6 bar (260 kPa, 37 psi)

### Minimum Bubble Point - IPA

TF (PTFE) Membrane  
0.2 µm: 1.0 bar (100 kPa, 15 psi)  
0.45 µm: 0.4 bar (40 kPa, 6 psi)

## Ordering Information

### HPLC Mobile Phase Filtration Membranes, 47 mm

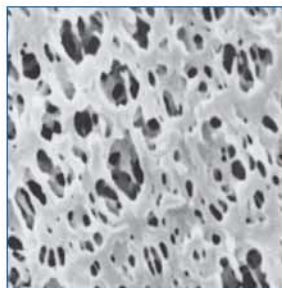
Part Number	Description	Pkg
66557	0.2 µm, GH Polypro (PP) membrane	100/pkg
66548	0.45 µm, GH Polypro (PP) membrane	100/pkg
66143	0.2 µm, TF (PTFE) membrane	100/pkg
66149	0.45 µm, TF (PTFE) membrane	100/pkg
66477	0.2 µm, PVDF membrane	100/pkg
66480	0.45 µm, PVDF membrane	100/pkg
66602	0.2 µm, Nylaflo (nylon) membrane	100/pkg
66608	0.45 µm, Nylaflo (nylon) membrane	100/pkg

### Related Products

47 mm Filter Funnels, Glass	206
SolVac® Filter Holder	183
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

## GH Polypro (GHP) Membrane Disc Filters

All purpose, universal membrane with maximum chemical compatibility for both aqueous solutions and aggressive solvents



- ▶ Maximum versatility. Filters aqueous solutions or aggressive chemicals.
- ▶ Low protein binding membrane gives high recovery of critical proteinaceous samples.
- ▶ HPLC certified. Provides assurance that the filter will not add artifacts to your analysis.
- ▶ Low API adsorption.

### Applications

- ▶ Our number-one choice for filtering HPLC mobile phases.
- ▶ Available in 0.2 µm for UHPLC.
- ▶ Suitable for pharmaceutical HPLC applications.

### Specifications

**Filter Media**  
Hydrophilic polypropylene

**Pore Size**  
0.2 and 0.45 µm

**Typical Thickness**  
0.2 µm: 101 µm (4.0 mils)  
0.45 µm: 114 µm (4.5 mils)

**Typical Water Flow Rate**  
mL/min/cm<sup>2</sup> at 0.7 bar  
(70 kPa, 10 psi)  
0.2 µm: 20  
0.45 µm: 31

**Maximum Operating Temperature**  
55 °C (131 °F)

**Minimum Bubble Point - Water**  
0.2 µm: 2.9 bar (290 kPa, 42 psi)  
0.45 µm: 1.38 bar (138 kPa, 20 psi)

### Performance

GHP Membrane is Virtually a Universal Membrane for All Applications

Membrane	Proteinaceous	General Aqueous	Non-Aggressive Organic	Aggressive Organic
GHP	++	++	++	++
PTFE	-	-	++	++
PVDF	++	++	+	-
Nylon	+*	++	+	-

++ Recommended  
+ Suitable  
- Not Recommended  
\* Dependent on protein type and concentration.

### Ordering Information

GHP Polypro (GHP) Membrane Disc Filters

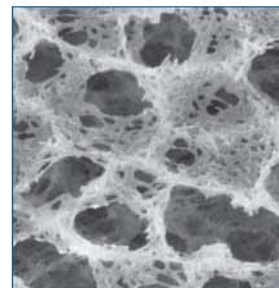
Part Number	Description	Pkg
60189	0.2 µm, 25 mm	100/pkg
66557	0.2 µm, 47 mm	100/pkg
66628	0.2 µm, 50 mm	100/pkg
66629	0.45 µm, 13 mm	100/pkg
66340	0.45 µm, 25 mm	100/pkg
66640	0.45 µm, 37 mm	100/pkg
66548	0.45 µm, 47 mm	100/pkg
66625	0.45 µm, 50 mm	100/pkg
66626	0.45 µm, 90 mm	100/pkg

### Related Products

47 mm Filter Funnel, Glass	206
SolVac® Filter Holder	183
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

## Nylaflor™ Membrane Disc Filters

A highly versatile laboratory membrane filter



- ▶ Excellent chemical compatibility with esters, bases, and alcohols.
- ▶ Naturally hydrophilic.
- ▶ Available in 0.2 and 0.45 µm pore sizes, in diameters ranging from 13 to 142 mm.
- ▶ HPLC certified. Provides assurance that the filter will not add artifacts to your analysis.

### Applications

- ▶ Useful for a wide range of applications. Offers broad chemical resistance to common solvents.
- ▶ Not recommended for acids > 1N or halogenated solvents.

### Specifications

**Filter Media**  
Hydrophilic nylon

**Pore Size**  
0.2 and 0.45 µm

**Typical Thickness**  
127 µm (5 mils)

**Typical Water Flow Rate**  
mL/min/cm<sup>2</sup> at 0.7 bar  
(70 kPa, 10 psi)  
0.2 µm: 12  
0.45 µm: 16

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

**Minimum Bubble Point - Water**  
0.2 µm: 3.4 bar (340 kPa, 49 psi)  
0.45 µm: 2.6 bar (260 kPa, 37 psi)

### Ordering Information

Nylaflor Membrane Disc Filters, 0.2 µm

Part Number	Description	Pkg
66600	13 mm	100/pkg
66601	25 mm	100/pkg
66602	47 mm	100/pkg
66603	90 mm	100/pkg
66604	142 mm	25/pkg

Nylaflor Membrane Disc Filters, 0.45 µm

Part Number	Description	Pkg
66606	13 mm	100/pkg
66607	25 mm	100/pkg
66608	47 mm	100/pkg
66609	90 mm	100/pkg
66610	142 mm	25/pkg

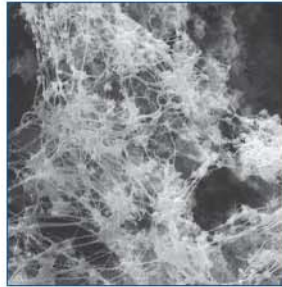
### Related Products

47 mm Filter Funnel, Glass	206
142 mm Disc Filter Holder, Stainless Steel	275
SolVac® Filter Holder	183
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279



## PTFE Membrane Disc Filters

Strong, chemically resistant membranes for solvent and HPLC mobile phase filtration



### Specifications

#### Filter Media

Hydrophobic polytetrafluoroethylene (PTFE) on a polypropylene support

#### Pore Size

0.2, 0.45  $\mu\text{m}$ , and 1  $\mu\text{m}$

#### Typical Thickness

0.2  $\mu\text{m}$ : 139  $\mu\text{m}$  (5.5 mils)  
0.45 and 1  $\mu\text{m}$ : 135  $\mu\text{m}$  (5.3 mils)

#### Typical Air Flow Rate

L/min/cm<sup>2</sup> at 0.7 bar (70 kPa, 10 psi)

0.2  $\mu\text{m}$ : 2

0.45  $\mu\text{m}$ : 3

1  $\mu\text{m}$ : 7

#### Maximum Operating Temperature

100 °C (212 °F)

#### Minimum Bubble Point - IPA

0.2  $\mu\text{m}$ : 1.0 bar (100 kPa, 15 psi)

0.45  $\mu\text{m}$ : 0.4 bar (40 kPa, 6 psi)

1  $\mu\text{m}$ : 0.1 bar (10 kPa, 2 psi)

- ▶ Low chemical background permits highly sensitive, interference-free determinations.
- ▶ Ideal for filtration of gas and/or organic solvents.

### Applications

- ▶ Ultimate in chemical compatibility for filtering harsh chemicals and HPLC mobile phases that destroy other membrane materials.

### Ordering Information

#### TF (PTFE) Membrane Disc Filters

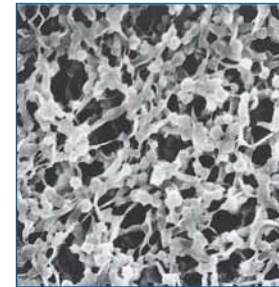
Part Number	Description	Pkg
66141	TF 200, 0.2 $\mu\text{m}$ , 13 mm	100/pkg
66142	TF 200, 0.2 $\mu\text{m}$ , 25 mm	100/pkg
66143	TF 200, 0.2 $\mu\text{m}$ , 47 mm	100/pkg
66630	TF 200, 0.2 $\mu\text{m}$ , 50 mm	100/pkg
66145	TF 200, 0.2 $\mu\text{m}$ , 142 mm	25/pkg
66146	TF 200, 0.2 $\mu\text{m}$ , 293 mm	25/pkg
66147	TF 450, 0.45 $\mu\text{m}$ , 13 mm	100/pkg
66148	TF 450, 0.45 $\mu\text{m}$ , 25 mm	100/pkg
66149	TF 450, 0.45 $\mu\text{m}$ , 47 mm	100/pkg
66631	TF 450, 0.45 $\mu\text{m}$ , 50 mm	100/pkg
66151	TF 450, 0.45 $\mu\text{m}$ , 142 mm	25/pkg
66152	TF 450, 0.45 $\mu\text{m}$ , 293 mm	25/pkg
66153	TF 1000, 1 $\mu\text{m}$ , 13 mm	100/pkg
66154	TF 1000, 1 $\mu\text{m}$ , 25 mm	100/pkg
66159	TF 1000, 1 $\mu\text{m}$ , 37 mm, with support pads	100/pkg
66155	TF 1000, 1 $\mu\text{m}$ , 47 mm	100/pkg
66158	TF 1000, 1 $\mu\text{m}$ , 293 mm	25/pkg

#### Related Products

47 mm Filter Funnels, Glass	206
SolVac® Filter Holder	183
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

## PVDF Membrane Disc Filters

Compatible with aggressive and non-aggressive solvent-based solutions



### Specifications

#### Filter Media

Hydrophilic polyvinylidene fluoride (PVDF)

#### Pore Size

0.2 and 0.45  $\mu\text{m}$

#### Typical Thickness

0.2  $\mu\text{m}$ : 140  $\mu\text{m}$  (5.5 mils)

0.45  $\mu\text{m}$ : 127  $\mu\text{m}$  (5.0 mils)

#### Typical Water Flow Rate

mL/min/cm<sup>2</sup> at 0.7 bar

(70 kPa, 10 psi)

0.2  $\mu\text{m}$ : 5

0.45  $\mu\text{m}$ : 26

#### Maximum Operating Temperature - Water

100 °C (212 °F)

#### Minimum Bubble Point - Water

0.2  $\mu\text{m}$ : 2.3 bar (230 kPa, 34 psi)

0.45  $\mu\text{m}$ : 1.1 bar (110 kPa, 16 psi)

#### Sterilization

Provided non-sterile. Autoclavable if desired.

- ▶ Useful for a wide range of applications including aggressive and non-aggressive solvent-based mobile phase.
- ▶ HPLC certified. Provides assurance that the filter will not add artifacts to your analysis.
- ▶ Membrane is autoclavable.

### Applications

- ▶ Offers excellent chemical compatibility, even with aggressive acids and alcohols.
- ▶ Not recommended for acetone, DMF, DMSO, or bases > 6N.

### Ordering Information

#### PVDF 200 Membrane Disc Filters, 0.2 $\mu\text{m}$

Part Number	Description	Pkg
66475	13 mm	100/pkg
66476	25 mm	100/pkg
66477	47 mm	100/pkg

#### PVDF 450 Membrane Disc Filters, 0.45 $\mu\text{m}$

Part Number	Description	Pkg
66478	13 mm	100/pkg
66479	25 mm	100/pkg
66480	47 mm	100/pkg

#### Related Products

47 mm Filter Funnels, Glass	206
SolVac® Filter Holder	183
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

## Acrodisc® Syringe Filters With GHP Membrane

The "universal" membrane filter for all your analytical filtration requirements



- Acrodisc PSF syringe filters are Zymark® and SOTAX® Automation Certified to ensure smooth operation and worry-free performance 24 hours a day in automated workstations.
- Avoid the expense and inconvenience of keeping a variety of filters on hand. Versatile filter for aqueous and aggressive organic solvent-based solutions.
- Low protein binding membrane gives high recovery of critical proteinaceous samples.
- Accurate analysis. HPLC certified for low levels of UV-absorbing extractables.
- 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.
- Protects columns and instrumentation from particulate buildup better than other filters.

### Applications

- Highly recommended for filtering HPLC samples.
- Available in 0.2 µm for UHPLC applications.
- The Acrodisc PSF GxP syringe filter provides two to four times the throughput of standard prefilter devices for particulate-laden samples.
- 25 mm Acrodisc PSF syringe filter is available in robotic-compatible AutoPack™ packaging for SOTAX AT-70 SMART® and CTS and Zymark TPW®, APW®, and MultiDose® dissolution systems.

### Specifications

#### Materials of Construction

Filter Media: GH Polypro membrane (GHP, hydrophilic polypropylene)  
Housing: Polypropylene  
GxF Prefilter: Borosilicate glass

#### Pore Size

GHP Membrane: 0.2 and 0.45 µm  
Glass Fiber (GF): 1 µm  
GxF Prefilter: 40 - 1 µm

#### Effective Filtration Area

13 mm: 1.0 cm<sup>2</sup>  
25 mm PSF: 3.9 cm<sup>2</sup>

#### Sample Volume

13 mm: < 10 mL  
25 mm PSF: < 150 mL

#### Inlet/Outlet Connections

13 mm: Female luer lock inlet, minispike outlet  
25 mm PSF: Female luer lock inlet, male slip luer outlet

#### Typical Hold-Up Volume

(with air purge)  
13 mm: < 14 µL  
25 mm PSF: < 125 µL  
25 mm PSF GxP: < 200 µL

#### Maximum Operating Temperature

25 mm PSF: 55 °C (131 °F) at 2.1 bar (210 kPa, 30 psi)

#### Maximum Operating Pressure

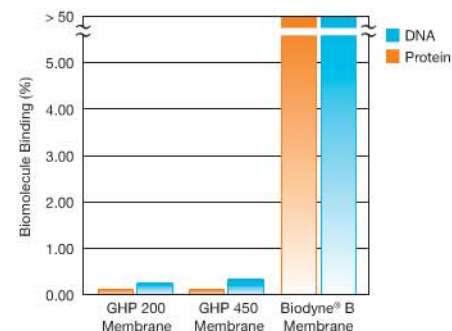
13 mm: 6.3 bar (630 kPa, 90 psi)  
25 mm PSF: 4.1 bar (410 kPa, 60 psi) at 21 - 24 °C (70 - 75 °F)  
2.1 bar (210 kPa, 30 psi) at 55 °C (131 °F)

#### Typical Water Flow Rate

mL/min at 0.7 bar (70 kPa, 10 psi)  
13 mm, 0.2 µm: 17  
13 mm, 0.45 µm: 28  
mL/min at 2.1 bar (210 kPa, 30 psi)  
25 mm PSF, 0.2 µm: 215  
0.45 µm: 300  
25 mm GxP/PSF, 0.2 µm: 175  
0.45 µm: 195

### Performance

#### GHP Membrane is Extremely Low in Biomolecule Binding



<sup>32</sup>P-labeled BSA (1.6 µg) or <sup>32</sup>P-labeled DNA (500 ng) were 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/min.

Binding was determined by comparing the amount of radioactivity remaining in the membrane (triplicate) to the activity of the starting material by placing the disc or solution directly into scintillation cocktail and counting in a scintillation counter. Biodyne B membrane is designed for biomolecule binding and was used as a positive control.

### Ordering Information

#### Acrodisc® Syringe Filters With GHP Membrane, 13 mm

Part Number	Description	Pkg
4554	0.2 µm, minispike outlet	100/pkg, 300/cs
4567	0.2 µm, minispike outlet	1000/pkg
4556	0.45 µm, minispike outlet	100/pkg, 300/cs
4563	0.45 µm, minispike outlet	1000/pkg

#### Acrodisc Syringe Filters With GHP Membrane, 25 mm

Part Number	Description	Pkg
4564	0.2 µm	50/pkg, 200/cs
4566	0.2 µm	1000/pkg
4560	0.45 µm	50/pkg, 200/cs
4562	0.45 µm	1000/pkg

#### Acrodisc GF Syringe Filters With GHP Membrane, 25 mm

Part Number	Description	Pkg
4559	GF/0.45 µm	50/pkg, 200/cs
4558	GF/0.45 µm	1000/pkg

#### Related Products

47 mm Filter Funnels, Glass	206
AcroPrep™ 24 Filtration System	201
HPLC Mobile Phase Filtration Membranes	177
SolVac® Filter Holder	182
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

#### Zymark® and SOTAX® Automation Certified

##### Acrodisc PSF Syringe Filters With GHP Membrane, 25 mm

Part Number	Description	Pkg
AP-4364	0.2 µm, AutoPack™ tubes	25/pkg, 200/cs
AP-4564	0.2 µm	50/pkg, 200/cs
AP-4566	0.2 µm	1000/pkg
AP-4357	0.45 µm, AutoPack tubes	25/pkg, 200/cs
AP-4560	0.45 µm	50/pkg, 200/cs
AP-4562	0.45 µm	1000/pkg

#### Zymark and SOTAX Automation Certified

##### Acrodisc PSF GxP Syringe Filters With GHP Membrane, 25 mm

Part Number	Description	Pkg
AP-4305	GxF/0.2 µm, AutoPack tubes	25/pkg, 200/cs
AP-4307	GxF/0.2 µm	50/pkg, 200/cs
AP-4306	GxF/0.2 µm	1000/pkg
AP-4557	GxF/0.45 µm, AutoPack tubes	25/pkg, 200/cs
AP-4559	GxF/0.45 µm	50/pkg, 200/cs
AP-4558	GxF/0.45 µm	1000/pkg



## Acrodisc® Syringe Filters With PVDF Membrane

Hydrophilic membrane compatible with a wide variety of solvents



### Specifications

#### Materials of Construction

Filter Media: Hydrophilic polyvinylidene fluoride (PVDF)  
Housing: Polypropylene  
GxF Prefilter: Borosilicate glass

#### Pore Size

PVDF Membrane: 0.2 and 0.45 µm  
GxF Prefilter: 40 - 1 µm

#### Effective Filtration Area

13 mm: 1.0 cm<sup>2</sup>  
25 mm PSF: 3.9 cm<sup>2</sup>

#### Sample Volume

13 mm: < 10 mL  
25 mm PSF: < 150 mL

#### Inlet/Outlet Connections

13 and 25 mm PSF: Female luer lock inlet, male slip luer outlet  
13 mm: Available with minispike outlet

#### Typical Hold-Up Volume

(with air purge)  
13 mm (minispike): < 14 µL  
13 mm (male luer): < 30 µL  
25 mm PSF: < 100 µL  
25 mm PSF GxF: < 125 µL

#### Maximum Operating Temperature

13 mm: 55 °C (131 °F)  
25 mm PSF: 82 °C (180 °F) at 2.1 bar (210 kPa, 30 psi)

#### Maximum Operating Pressure

13 mm: 3.5 bar (350 kPa, 50 psi)  
25 mm PSF: 4.1 bar (410 kPa, 60 psi) at 21 - 24 °C (70 - 75 °F);  
2.1 bar (210 kPa, 30 psi) at 82 °C (180 °F)

#### Typical Water Flow Rate

mL/min at 3.1 bar (310 kPa, 45 psi)  
13 mm, 0.2 µm: 5  
13 mm, 0.45 µm: 15  
mL/min at 2.1 bar (210 kPa, 30 psi)  
25 mm, 0.45 µm PSF and GxF: 144

- Acrodisc PSF syringe filters are Zymark\* and SOTAX\* Automation Certified to assure smooth operation and worry-free performance 24 hours a day in automated workstations.
- Useful for a wide range of applications, including aggressive and non-aggressive solvent-based mobile phase.
- Reduces experimental variables. HPLC certified for low levels of UV-absorbing extractables.
- Protects columns and instrumentation against particulate build up.
- 13 mm device with minispike configuration offers low hold-up and easy filtration into autosampler vials.

### Applications

- Offers excellent chemical compatibility, even with aggressive acids and alcohols.
- Not recommended for acetone, DMF, DMSO, or bases > 6N.
- 25 mm Acrodisc PSF syringe filter is available in robotic-compatible AutoPack™ packaging for SOTAX AT-70 SMART\* and CTS and Zymark TPW\*, APW\*, and MultiDose\* dissolution systems.

### Ordering Information

#### Acrodisc® Syringe Filters With PVDF Membrane, 13 mm

Part Number	Description	Pkg
4450	0.2 µm, minispike outlet	100/pkg, 300/cs
4544	0.2 µm, minispike outlet	1000/pkg
4452	0.45 µm, minispike outlet	100/pkg, 300/cs
4545	0.45 µm, minispike outlet	1000/pkg
4455	0.2 µm, male slip luer outlet	100/pkg, 300/cs
4457	0.45 µm, male slip luer outlet	100/pkg, 300/cs

#### Acrodisc Syringe Filters With PVDF Membrane, 25 mm

Part Number	Description	Pkg
4406	0.2 µm	50/pkg, 200/cs
4520	0.2 µm	1000/pkg
4519	0.45 µm, AutoPack™ tubes	25/pkg, 200/cs
4408	0.45 µm	50/pkg, 200/cs
4500	0.45 µm	1000/pkg

#### Related Products

47 mm Filter Funnels, Glass	206
AcroPrag™ 24 Filtration System	201
HPLC Mobile Phase Filtration Membranes	177
SolVac® Filter Holder	182
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

#### Zymark\* and SOTAX\* Automation Certified Acrodisc PSF Syringe Filters With PVDF Membrane, 25 mm

Part Number	Description	Pkg
AP-4795	0.2 µm, AutoPack tubes	25/pkg, 200/cs
AP-4796	0.2 µm	50/pkg, 200/cs
AP-4797	0.2 µm	1000/pkg
AP-4519	0.45 µm, AutoPack tubes	25/pkg, 200/cs
AP-4408	0.45 µm	50/pkg, 200/cs
AP-4500	0.45 µm	1000/pkg

#### Zymark and SOTAX Automation Certified Acrodisc PSF GxF Syringe Filters With PVDF Membrane, 25 mm

Part Number	Description	Pkg
AP-4792	GxF/0.2 µm, AutoPack tubes	25/pkg, 200/cs
AP-4793	GxF/0.2 µm	50/pkg, 200/cs
AP-4794	GxF/0.2 µm	1000/pkg
AP-4309	GxF/0.45 µm, AutoPack tubes	25/pkg, 200/cs
AP-4310	GxF/0.45 µm	50/pkg, 200/cs
AP-4308	GxF/0.45 µm	1000/pkg

## Acrodisc® Syringe Filters With Nylon Membrane

Versatile filters for both aqueous and solvent-based sample filtration



### Specifications

#### Materials of Construction

Filter Media: Nylon  
Housing: Polypropylene  
GxF Prefilter: Borosilicate glass

#### Pore Size

Nylon Membrane: 0.2 and 0.45 µm  
GxF Prefilter: 40 - 1 µm

#### Effective Filtration Area

4 mm: 0.2 cm<sup>2</sup>  
13 mm: 1.0 cm<sup>2</sup>  
25 mm PSF: 3.9 cm<sup>2</sup>

#### Sample Volume

4 mm: < 2 mL  
13 mm: < 10 mL  
25 mm PSF: < 150 mL

#### Inlet/Outlet Connections

4, 13, and 25 mm PSF: Female luer lock inlet, male slip luer outlet  
13 mm: Available with minispike outlet

#### Typical Hold-Up Volume (with air purge)

4 mm: < 10 µL  
13 mm (minispike): < 14 µL  
13 mm (male luer): < 30 µL  
25 mm PSF: < 125 µL  
25 mm PSF GxF: < 150 µL

#### Maximum Operating Temperature

55 °C (131 °F) at 2.1 bar (210 kPa, 30 psi)

#### Maximum Operating Pressure

4 mm: 5.2 bar (520 kPa, 75 psi)  
13 mm: 6.9 bar (690 kPa, 100 psi)  
25 mm PSF: 4.1 bar (410 kPa, 60 psi) at 21 - 24 °C (70 - 75 °F);  
2.1 bar (210 kPa, 30 psi) at 55 °C (131 °F)

#### Typical Water Flow Rate

mL/min at 2.1 bar (210 kPa, 30 psi)  
13 mm, 0.2 µm: 10  
13 mm, 0.45 µm: 15  
25 mm PSF, 0.2 µm: 115  
0.45 µm: 245  
25 mm PSF GxF/0.45 µm: 215

- Acrodisc PSF syringe filters are Zymark\* and SOTAX\* Automation Certified to assure smooth operation and worry-free performance 24 hours a day in automated workstations.
- Excellent chemical compatibility with esters, bases, and alcohols.
- Saves time because no prewetting is required.
- Easy filtration of particulate-laden samples with the glass fiber prefilter version.
- 13 mm device with minispike configuration offers low hold-up and easy filtration into autosampler vials.
- Prevents spurious peaks on chromatograms for accurate experimental results. HPLC certified for low levels of UV-absorbing extractables.

### Applications

- The Acrodisc PSF GxF syringe filter provides two to four times the throughput of standard prefilter devices.
- Not recommended for acids > 1 N or halogenated solvents.
- 25 mm Acrodisc PSF syringe filter is available in robotic-compatible AutoPack™ packaging for SOTAX AT-70 SMART\* and CTS and Zymark TPW\*, APW\*, and MultiDose\* dissolution systems.

### Ordering Information

#### Acrodisc Syringe Filters With Nylon Membrane, 13 mm

Part Number	Description	Pkg
4550	0.2 µm, minispike outlet	100/pkg, 300/cs
4561	0.2 µm, minispike outlet	1000/pkg
4551	0.45 µm, minispike outlet	100/pkg, 300/cs
4546	0.45 µm, minispike outlet	1000/pkg

#### Acrodisc Syringe Filters With Nylon Membrane, 13 mm

Part Number	Description	Pkg
4427	0.2 µm, male slip luer outlet	100/pkg, 300/cs
4540	0.2 µm, male slip luer outlet	1000/pkg
4426	0.45 µm, male slip luer outlet	100/pkg, 300/cs
4541	0.45 µm, male slip luer outlet	1000/pkg

#### Acrodisc Syringe Filters With Nylon Membrane, 25 mm

Part Number	Description	Pkg
4436	0.2 µm	50/pkg, 200/cs
4522	0.2 µm	1000/pkg
4517	0.45 µm, AutoPack™ tubes	25/pkg, 200/cs
4438	0.45 µm	50/pkg, 200/cs
4502	0.45 µm	1000/pkg

#### Acrodisc GF Syringe Filters With Nylon Membrane, 25 mm

Part Number	Description	Pkg
4548	GF/0.45 µm, AutoPack tubes	25/pkg, 200/cs
4549	GF/0.45 µm	50/pkg, 200/cs
4528	GF/0.45 µm	1000/pkg

#### Related Products

47 mm Filter Funnel, Glass	206
AcroPrep™ 24 Filtration System	201
HPLC Mobile Phase Filtration Membranes	177
SolVac® Filter Holder	182
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

#### Zymark\* and SOTAX\* Automation Certified Acrodisc PSF Syringe Filters With Nylon Membrane, 25 mm

Part Number	Description	Pkg
AP-4437	0.2 µm, AutoPack tubes	25/pkg, 200/cs
AP-4436	0.2 µm	50/pkg, 200/cs
AP-4522	0.2 µm	1000/pkg
AP-4517	0.45 µm, AutoPack tubes	25/pkg, 200/cs
AP-4438	0.45 µm	50/pkg, 200/cs
AP-4502	0.45 µm	1000/pkg

#### Zymark and SOTAX Automation Certified Acrodisc PSF GxF Syringe Filters With Nylon Membrane, 25 mm

Part Number	Description	Pkg
AP-4786	GxF/0.2 µm, AutoPack tubes	25/pkg, 200/cs
AP-4787	GxF/0.2 µm	50/pkg, 200/cs
AP-4788	GxF/0.2 µm	1000/pkg
AP-4548	GxF/0.45 µm, AutoPack tubes	25/pkg, 200/cs
AP-4549	GxF/0.45 µm	50/pkg, 200/cs
AP-4528	GxF/0.45 µm	1000/pkg



## Acrodisc® Syringe Filters With PTFE Membrane

Exceptional chemical and temperature compatibility



### Specifications

#### Materials of Construction

Filter Media: Hydrophobic PTFE membrane on a polypropylene support  
Housing: Polypropylene  
GxF Prefilter: Borosilicate glass

#### Pore Size

PTFE Membrane: 0.2 and 0.45  $\mu\text{m}$   
GxF Prefilter: 40 - 1  $\mu\text{m}$

#### Effective Filtration Area

4 mm: 0.2  $\text{cm}^2$   
13 mm: 1.0  $\text{cm}^2$   
25 mm PSF: 3.9  $\text{cm}^2$

#### Sample Volume

4 mm: < 2 mL  
13 mm: < 10 mL  
25 mm PSF: < 150 mL

#### Inlet/Outlet Connections

4, 13, and 25 mm PSF: Female luer lock inlet, male slip luer outlet  
13 mm: Available with minispikes outlet

#### Typical Hold-Up Volume (with air purge)

4 mm: < 10  $\mu\text{L}$   
13 mm (minispikes): < 14  $\mu\text{L}$   
13 mm (male luer): < 30  $\mu\text{L}$   
25 mm PSF: < 125  $\mu\text{L}$

#### Typical Liquid Flow Rate (MeOH)

mL/min at 1.0 bar (100 kPa, 15 psi)  
25 mm PSF, 0.2  $\mu\text{m}$ : 245  
25 mm PSF, 0.45  $\mu\text{m}$ : 510  
25 mm PSF, GxF/0.2  $\mu\text{m}$ : NA  
25 mm PSF, GxF/0.45  $\mu\text{m}$ : 395

#### Maximum Operating Temperature

100 °C (212 °F) at 2.1 bar (210 kPa, 30 psi)

#### Maximum Operating Pressure

4 mm: 5.2 bar (520 kPa, 75 psi)  
13 mm: 6.9 bar (690 kPa, 100 psi)  
25 mm PSF: 4.1 bar (410 kPa, 60 psi) at 21 - 24 °C (70 - 75 °F);  
2.1 bar (210 kPa, 30 psi) at 100 °C (212 °F)

#### Sterilization of 25 mm Filters

Provided non-sterile. If desired, autoclave at 121- 123 °C (250 - 253 °F) at 1.0 bar (100 kPa, 15 psi) for a maximum of 15 min.

### Applications

- ▶ Ultimate in chemical compatibility for filtering harsh chemicals that destroy other membrane materials.
- ▶ The Acrodisc PSF GxF syringe filter provides two to four times the throughput of standard prefilter devices.
- ▶ Moisture barrier for venting applications.
- ▶ 25 mm Acrodisc PSF syringe filter is available in robotic-compatible AutoPack™ packaging for SOTAX AT-70 SMART\* and CTS and Zymark TPW\*, APW\*, and MultiDose\* dissolution systems.

### Ordering Information

#### Acrodisc® Syringe Filter With PTFE Membrane, 4 mm

Part Number	Description	Pkg
4472	0.45 $\mu\text{m}$	250/pkg, 750/cs

#### Acrodisc Syringe Filters With PTFE Membrane, 13 mm

Part Number	Description	Pkg
4552	0.2 $\mu\text{m}$ , minispikes outlet	100/pkg, 300/cs
4553	0.45 $\mu\text{m}$ , minispikes outlet	100/pkg, 300/cs
4555	0.45 $\mu\text{m}$ , minispikes outlet	1000/pkg

#### Acrodisc Syringe Filters With PTFE Membrane, 13 mm

Part Number	Description	Pkg
4423	0.2 $\mu\text{m}$ , male slip luer outlet	100/pkg, 300/cs
4542	0.2 $\mu\text{m}$ , male slip luer outlet	1000/pkg
4422	0.45 $\mu\text{m}$ , male slip luer outlet	100/pkg, 300/cs
4543	0.45 $\mu\text{m}$ , male slip luer outlet	1000/pkg

#### Acrodisc Syringe Filters With PTFE Membrane, 25 mm

Part Number	Description	Pkg
4225	0.2 $\mu\text{m}$	50/pkg, 200/cs
4521	0.2 $\mu\text{m}$	1000/pkg
4518	0.45 $\mu\text{m}$ , AutoPack™ tubes	25/pkg, 200/cs
4219	0.45 $\mu\text{m}$	50/pkg, 200/cs
4501	0.45 $\mu\text{m}$	1000/pkg
4226	1 $\mu\text{m}$	50/pkg, 200/cs
4503	1 $\mu\text{m}$	1000/pkg

#### Related Products

47 mm Filter Funnels, Glass	206
AcroPrep™ 24 Filtration System	201
HPLC Mobile Phase Filtration Membranes	177
SoiVac® Filter Holder	182
Stainless Steel Forceps	230, 280
Vacuum/Pressure Pumps	279

#### Zymark\* and SOTAX\* Automation Certified Acrodisc PSF Syringe Filters With PTFE Membrane, 25 mm

Part Number	Description	Pkg
AP-4520	0.2 $\mu\text{m}$ , AutoPack tubes	25/pkg, 200/cs
AP-4225	0.2 $\mu\text{m}$	50/pkg, 200/cs
AP-4521	0.2 $\mu\text{m}$	1000/pkg
AP-4518	0.45 $\mu\text{m}$ , AutoPack tubes	25/pkg, 200/cs
AP-4219	0.45 $\mu\text{m}$	50/pkg, 200/cs
AP-4501	0.45 $\mu\text{m}$	1000/pkg

#### Zymark and SOTAX Automation Certified Acrodisc PSF GxF Syringe Filters With PTFE Membrane, 25 mm

Part Number	Description	Pkg
AP-4789	GxF/0.2 $\mu\text{m}$ , AutoPack tubes	25/pkg, 200/cs
AP-4790	GxF/0.2 $\mu\text{m}$	50/pkg, 200/cs
AP-4791	GxF/0.2 $\mu\text{m}$	1000/pkg
AP-4301	GxF/0.45 $\mu\text{m}$ , AutoPack tubes	25/pkg, 200/cs
AP-4303	GxF/0.45 $\mu\text{m}$	50/pkg, 200/cs
AP-4302	GxF/0.45 $\mu\text{m}$	1000/pkg