



Certified Sample and Solvent Filtration Products

Filtration of samples and solvents is a preventative maintenance procedure that saves lab time and money. Filtration provides immediate protection for the components of column and instrumentation by minimizing down time.

Pall Life Sciences filters have been Certified for Compliance; which means they have been designed and developed to assist customers in complying with their regulatory and quality objectives.

Waters carries a broad range of Pall Life Sciences filter products, a range of different membranes for solvent and sample compatibility, and a variety of devices for various filtration applications.

Choosing the right filter for your application.

To choose the right filter you need to consider sample characteristics, volume, pore size and decide if the sample may require prefiltration because it is laden with particulate matter.

Membrane Choices

GHP Acrodiscs—

Hydrophilic propylene membrane suitable for aqueous, organic and has low protein binding.

Nylon Acrodiscs—

hydrophilic nylon membrane

GHP Acrodiscs GF and Nylon Acrodiscs GF—

designed with a glass fiber prefilter over the membrane for hard to filter samples laden with particulate matter.

Glass Fiber Acrodiscs—

can be used alone or as a prefilter with another Acrodiscs in series.

Acrodisc LC (PVDF)—

hydrophilic polyvinylidene fluoride good for aqueous and organic solvents.

Acrodisc CR(PTFE)—

used for aggressive organic solvents

Ion Chromatography (IC) Acrodisc—

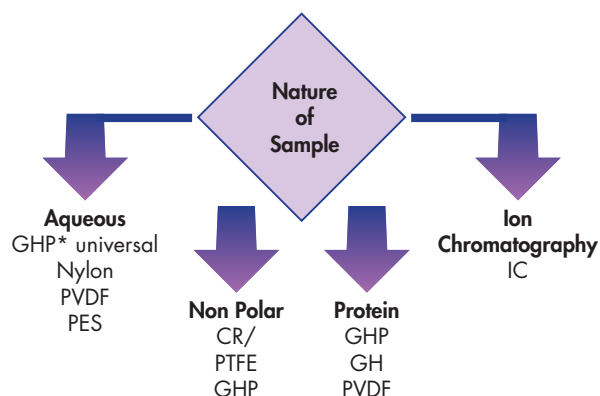
certified to contain low ionic backgrounds

Supor (PES)—

hydrophilic polyethersulfone for biological, pharmaceutical or sterilizing. Can be gamma sterilized or autoclaved.

Concerned about particulate matter in your sample?

STEP 1: What is the nature of your sample?



* For samples with laden particulate that are difficult to filter, it is best to use a syringe filter with a glass fiber pre-filter over the membrane. These are available in GHP and Nylon.

STEP 2: What is the volume of your sample?

Volume	Acrodisc Size	Hold Up Volume
< 2 mL	4 mm	< 10 µL
< 10 mL	13 mm minispikes	< 14 µL
< 10 mL	13 mm male luer	< 30 µL
< 100 mL	25 mm	< 100 µL

STEP 3: What micron size column are you using?

Column	Pore Size of Filter
> 3 µm	0.45 µm
< 3 µm	0.20 µm

Example 1: 1.5 mL of aqueous sample to be filter for injection on a 5 µm column:

Step	Question	Answer	Choice
1	Sample	aqueous	GHP and others
2	Volume	1.5 mL	4 mm or larger
3	Size	5 µm	0.45 µm

Choice: Membrane 0.45 µm GHP Acrodisc in 4 mm or larger. You can also use the Nylon, PVDF or PES (other choices of hydrophilic membranes under the aqueous sample path). In terms of device size, if you are injecting only a few µL of sample on the column, you can use any device size. The 13 and 25 mm Acrodiscs have hold up volumes of at most 100 µL, leaving plenty of filtered sample for the application.

Filter Design and Membrane Choices

	Acetone	Acetonitrile	Acetic acid, glacial	n-Butanol	Chloroform	Dioxane	Dimethyl formamide	Dimethyl sulfoxide	Ethanol	Ethyl acetate	Ethyl ether	Freon TF	Hydrochloric acid (1N)	Hexane, dry	Methanol	Methylene chloride	Methyl ethyl ketone	N-Methylpyrrolidone	Isopropanol	Sodium hydroxide (5N)	Tetrahydrofuran	Tetrahydrofuran/water (50/50)	Toluene	Water	
Legend: R = RESISTANT LR = LIMITED RESISTANCE NR = NOT RESISTANT • = INSUFFICIENT DATA																									
GH Polypro Syringe Filters																									
GHP Acrodisc® 13 (13 mm)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
GHP Acrodisc® (25 mm)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
GHP Acrodisc® GF (25 mm)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PTFE Syringe Filters																									
Acrodisc® 4CR PTFE (4 mm)	R*	R	R	R	LR	R	R*	R*	R	R*	R	R	R	R	R	LR	R*	R*	R	LR	LR	•	LR*	R	
Acrodisc® 13CR PTFE (13 mm)	R*	R	R	R	R	R	R*	R*	R	R*	R	R	R	R	R	R	R*	R*	R	R	R	R	R*	R	
Acrodisc® CR PTFE (25 mm)	R*	R	R	R	R	R	R*	R*	R	R*	R	R	R	R	R	R	R*	R*	R	R	R	R	R*	R	
PVDF Syringe Filters																									
Acrodisc® LC13 PVDF (13 mm)	NR*	R	R	R	R	R	NR*	NR*	R	R*	R	R	R	R	R	R	NR*	NR*	R	NR	R	R	R*	R	
Acrodisc® LC PVDF (25 mm)	NR*	R	R	R	R	R	NR*	NR*	R	R*	R	R	R	R	R	R	NR*	NR*	R	NR	R	R	R*	R	
Nylon Syringe Filters																									
Nylon Acrodisc® 4 (4 mm)	R*	R	R	R	NR	•	R*	R*	R	R*	NR	R	NR	R	R	NR	R*	R*	R	R	NR	LR	R*	R	
Nylon Acrodisc® 13 (13 mm)	R*	R	R	R	NR	•	R*	R*	R	R*	NR	R	NR	R	R	NR	R*	R*	R	R	NR	LR	R*	R	
Nylon Acrodisc® (25 mm)	R*	R	R	R	NR	•	R*	R*	R	R*	NR	R	NR	R	R	NR	R*	R*	R	R	NR	LR	R*	R	
Nylon Acrodisc® GF (25 mm)	R*	R	R	R	NR	•	R*	R*	R	R*	NR	R	NR	R	R	NR	R*	R*	R	R	NR	LR	R*	R	
Ion Chromatography Syringe Filters																									
IC Acrodisc® (13 mm & 25 mm)	NR	LR	NR	R	NR	•	NR	NR	•	LR	R	LR	•	LR	R	NR	•	NR	•	•	NR	•	R	R	
Glass Fibre Syringe Filters																									
GF Acrodisc®	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	LR	R	R	R	R	
Acrylic Copolymer Syringe Filters																									
Non-sterile Acrodisc® (25 mm)	NR	NR	NR	R	NR	NR	NR	NR	R	NR	NR	R	LR	NR	R	NR	NR	NR	R	R	NR	NR	NR	R	
Disc Filters																									
GH Polypro	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
FP Verciel (PVDF)	NR	R	R	R	R	LR	NR	NR	R	R	R	R	R	R	R	R	LR	NR	R	NR	LR	•	R	R	
Nylaflo (Nylon)	R	R	NR	R	NR	R	R	R	R	R	R	LR	NR	•	LR	NR	NR	R	R	R	R	R	NR	R	
TF (PTFE)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	

Note:

R = Resistant

No significant change was observed in flow rate or bubble point of the membrane.

LR = Limited Resistance

Moderate changes in physical properties or dimension of the membrane were observed. The filter may be suitable for short term, non-critical use at room temperature.

NR = Not Resistant

The membrane is basically unstable. In most cases, extensive shrinkage or swelling occurs. The filter may gradually weaken or partially dissolve after extended exposure.

* UV absorbance was set at 254 nm



Part Number Cross Reference

Pall Life Sciences Description	Whatman Part No.	Milipore® Part No.	Waters Part No.
PTFE, 4 mm, 0.45 µm	6783-0404	SJFHL04NS	WAT200508
PTFE, 13 mm, 0.2 µm	6783-1302	SJF6013NS	WAT200506
PTFE, 13 mm, 0.45 µm	6783-1304	SJFH013NS	WAT200502
PTFE, 25 mm, 0.2 µm	6784-2502	SLF6025NS	WAT200504
PTFE, 25 mm, 0.45 µm	6784-2504	SLSR025NS	WAT200500
PVDF, 13 mm, 0.45 µm	6792-1304	SJHV013NS	WAT200512
PVDF, 25 mm, 0.45 µm	—	SLHV025NS	WAT200510
GHP, 13 mm, 0.45 µm	6784-1304	SJFH013NS	WAT200516
GHP, 25 mm, 0.45 µm	6785-2504	SLCR025NS	WAT200514
Nylon, 4 mm, 0.45 µm	6790-0404	SJHV004NS	WAT200526
Nylon, 13 mm, 0.2 µm	6790-1302	—	WAT200524
Nylon, 13 mm, 0.45µm	6790-1304	—	WAT200520
Nylon, 25 mm, 0.2 µm	—	—	WAT200522
Nylon, 25 mm, 0.45 µm	—	—	WAT200518
Supor®, 25 mm, 0.45 µm	6780-2504	SLHA0250S	WAT200528
Supor®, 25 mm, 0.2 µm	6780-2502	SLGS0250S	WAT200529
PVDF, 47 mm, 0.45 µm	—	HVLP04700	WAT200530
PVDF, 47 mm, 0.2 µm	—	—	WAT200531
Nylon, 47 mm, 0.45 µm	7404-004	—	WAT200532
Nylon, 47 mm, 0.2 µm	7402-004	—	WAT200533
PTFE, 47 mm, 0.45 µm	7585-004	FHLP04700	WAT200534
PTFE, 47 mm, 0.2 µm	7582-004	FGLP04700	WAT200535
GHP, 47 mm, 0.45 µm	7002-0447	FHLC04700	WAT200537
Supor®, 47 mm, 0.2 µm	—	GSTF04700	WAT200539
Supor®, 47 mm, 0.45 µm	—	HATF04700	WAT200538
Supor®, 13 mm, 0.45 µm	—	HATF01300	WAT200540
Glass Filter Holder	—	XX1504700	WAT200543
Forceps	—	XX6200006	WAT200544
300 mL Funnel	—	XX1004704	WAT200545
Glass Base, Tabulated Cap	—	XX1504702	WAT200546
Ground Joint Flask	—	XX1504705	WAT200547
Thick Glass Prefilter	—	AP2501000	WAT200541
AVE Glass Prefilter	—	AP4001000	WAT200542

Solvent Filtration Membranes

Description	Quantity	Diameter	Pore Size	Part No.
PVDF Filter	pkg/100	47 mm	0.45 µm	WAT200530
Nylon Filter	pkg/100	47 mm	0.45 µm	WAT200532
PTFE Filter	pkg/100	47 mm	0.45 µm	WAT200534
	pkg/100	13 mm	0.45 µm	WAT200536
GH Polypro Filter	pkg/100	47 mm	0.45 µm	WAT200537
Supor® (PES) Filter	pkg/100	47 mm	0.45 µm	WAT200538
	pkg/100	13 mm	0.45 µm	WAT200540
PVDF Filter	pkg/100	47 mm	0.2 µm	WAT200531
Nylon Filter	pkg/100	47 mm	0.2 µm	WAT200533
PTFE Filter	pkg/100	47 mm	0.2 µm	WAT200535
Supor® (PES) Filter	pkg/100	47 mm	0.2 µm	WAT200539
Thick Glass Filter	pkg/100	10 mm	1.0 µm	WAT200541
A/E Glass Filter	pkg/100	10 mm	1.0 µm	WAT200542

Solvent Filtration Apparatus

The 300 mL capacity 47 mm Glass Filter Funnel and 1 litre capacity 47 mm Glass Funnel/Support Assembly are ideal for vacuum filtration of liquids and degassing of HPLC solvent and mobile phases. The 100% borosilicate glass construction assures resistance to even the most aggressive solvents.

Description	Part No.
Solvent Filtration Apparatus 110V, 60Hz	WAT085113
Solvent Filtration Apparatus 220V, 50Hz	WAT085102
All Glass Filter Holder 47mm, complete	WAT200543
Forceps, SS	WAT200544
Funnel, 300 mL	WAT200545
Glass Base, tabulated cap	WAT200546
Ground Joint Flask	WAT200547
Anodized Aluminum Spring Clamp	WAT025104
Swinney Holder	WAT200566
Vacuum Pump 110V, 60Hz	WAT085114
Vacuum Pump 110V, 50Hz	WAT085123
Vacuum Pump 220V, 50Hz	WAT085115

Ordering Information

Acrodisc® 13 mm

Pack Size		100	0.2 µm 300	1000	100	0.45 µm 300	1000
Aqueous	NYLON	WAT200524	WAT200525	WAT200834	WAT200520	WAT200521	WAT200832
	PVDF	WAT200806	WAT200807	—	WAT200512	WAT200513	WAT200827
Non-Polar	CR	WAT200506	WAT200507	WAT200823	WAT200502	WAT200503	WAT200821
Protein	PVDF	WAT200806	WAT200807	—	WAT200512	WAT200513	WAT200827
Ion Chromatography	PES	WAT200810	WAT200811	WAT200844	WAT200812	WAT200813	WAT200842

Acrodisc® 13 mm Mini spike

Pack Size		100	0.2 µm 300	1000	100	0.45 µm 300	1000
Aqueous	GHP	WAT097962	WAT097963	—	WAT200516	WAT200517	WAT200830
	NYLON	WAT200562	WAT200563	WAT200835	WAT200564	WAT200565	WAT200836
	PVDF	WAT200804	WAT200805	WAT200838	WAT200560	WAT200561	WAT200828
Non-Polar	CR	WAT200556	WAT200557	WAT200824	WAT200558	WAT200559	WAT200825
	GHP	WAT097962	WAT097963	—	WAT200516	WAT200517	WAT200830
Protein	IC	WAT200804	WAT200805	WAT200838	WAT200560	WAT200561	WAT200828

Acrodisc® 25 mm

Pack Size		50	0.2 µm 200	1000	50	0.45 µm 200	1000
Aqueous	GHP	WAT097964	WAT097965	—	WAT200514	WAT200515	WAT200829
	NYLON	WAT200522	WAT200523	WAT200833	WAT200518	WAT200519	WAT200831
	PVDF	WAT200808	WAT200809	WAT200839	WAT200510	WAT200511	WAT200826
	GHP GF*	—	—	—	WAT200802	WAT200803	WAT058853
	NYLON GF*	—	—	—	WAT200800	WAT200801	WAT200846
	GF**	—	—	—	WAT200818	WAT200819	WAT200840
	Versapor	—	—	—	—	—	WAT200841
	Sterile Syringe PES	WAT200529	—	—	WAT200528	—	—
Non-Polar	CR	WAT200504	WAT200505	WAT200822	WAT200500	WAT200501	WAT200820
	GHP	WAT097964	WAT097965	—	WAT200514	WAT200515	WAT200829
Protein	PVDF	WAT200808	WAT200809	WAT200839	WAT200510	WAT200511	WAT200826
Ion Chromatography	IC	WAT200814	WAT200815	WAT200845	WAT200816	WAT200817	WAT200843

* GHP GF and Nylon GF are Glass Fiber prefilters in combination with GHP and nylon filters.

** GF Glass Fiber only

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