

Syringeless Filters

Product Overview

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Bacteria			Yeasts			Sub-optical particles (haze)			Visible particles				
									Smallest visible particles (dust)	Average size of human hair			
0.05 μm	0.1 μm	0.2 μm	0.3 μm	0.45 μm	0.6 μm	1.0 μm	3.0 μm	5.0 μm	10 μm	25 μm	50 μm	100 μm	150 μm
Autovial UniPrep													
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Mini-UniPrep													
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NEW Mini-UniPrep™



Whatman Mini-UniPrep Syringeless Filters, now with a new durable plastic cap, provide a faster, easier way to remove particulates from samples being prepared for High Performance Liquid Chromatography (HPLC) analysis. In fact, Mini-UniPrep lets you prepare samples in one third the time required by other methods. Add up the time savings, plus the money saved from cutting multiple consumables out of the sample preparation process, and you'll see huge benefits for your lab.

Features and Benefits

- All-in-one filtration process allows you to process sample loads in one-third the time
- Wide range of membranes to choose from. 0.2 and 0.45 µm pore sizes to meet specific sample application requirements
- Compatible with most major autosamplers. Allows you to speed processes
- Fewer consumables required. Lower costs by up to 40 percent

Applications:

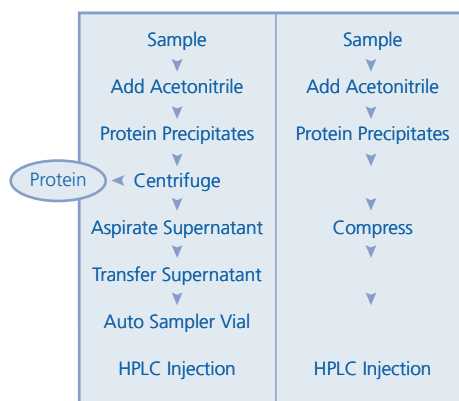
- Routine analysis
- Composite assays
- Content uniformity
- Protein precipitation
- Solubility testing
- Dissolution testing
- Sample filtration

Simple by design.

A filter membrane is housed at one end of a plunger, with a cap/septum on the other. By pressing the plunger through a liquid placed into the chamber, positive pressure forces the filtrate into the reservoir of the plunger.



'Spin' Method vs. Mini-UniPrep Method Protein Removal



Air escapes through vent holes until the evaporation seal is engaged, providing an airtight seal. Within seconds the Mini-UniPrep can be placed into any approved autosampler for injection into your instrument.

Simple

Place unfiltered sample in chamber.

Innovative

Compress filter plunger into sample chamber. Clean filtrate fills reservoir from bottom up.

Convenient

The Mini-UniPrep vial shape fits easily in autosamplers.

A Variety of Mini-UniPrep Filters to Meet Your Needs

In a process of continuous improvement and innovation, Whatman has listened to customers and created a whole family of Mini-UniPrep filters to meet specific needs. For customers using robotics to maximize throughput, Whatman offers Slit Septa Mini-UniPrep. For customers who need to filter light sensitive samples, there is Amber Mini-UniPrep.



Amber Mini-UniPrep Syringeless Filter

Protects samples from UV damage.

Features and Benefits

- Amber colorant prevents photo degradation of light sensitive samples. Same colorant used in pharmaceutical containers designed to meet USP specifications for light resistance
- Translucent amber chamber and plunger enable easy visual inspection

Applications

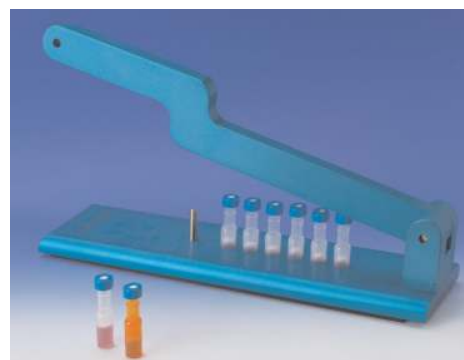
- Use with any compound that requires protection from light, such as catecholamines or vitamins



The Mini-UniPrep filter on the left is shown with fluid in the chamber. On the right, the filter plunger is shown compressed with the sample ready for analysis.

Six Position Compressor Makes Your Job Even Easier

The optional compressor allows you to process up to six Mini-UniPrep filters at the same time, further speeding your workflow and reducing the risk of hand stress.



Slit Septa Mini-UniPrep Syringeless Filter

For high throughput automation.

Features and Benefits

- Slit septum cap enables Mini-UniPrep use with current robotics on HPLC instruments for high throughput automation
- Durable yet flexible slit septum cap has been specially designed for instruments with sensitive sampling needs. Sample evaporation is minimal


Applications

- Use with standard robotics on HPLC instruments with sensitive needles, allowing for higher throughput

Choose the Right Mini-UniPrep Filtering Media

Sample Type	Suitable Mini-UniPrep Media
Particulate laden liquids	Glass Microfiber (GMF)
Aqueous/organic samples in 3 to 10 pH range	Nylon (NYL)
General filtration media/solvent based samples	Polypropylene (PP)
Chemically aggressive solutions	Polytertrafluoroethylene (PTFE)
Biological samples requiring low protein binding media	Polyethersulfone (PES)
Aqueous/organic solvents—low non-specific protein binding media	Polyvinylidene fluoride (PVDF)
Aqueous/organic solvents—high flow and loading capacity	Polypropylene Depth (DpPP)

Typical Data

Dimensions	 Equivalent in size to 12 mm x 32 mm vials
Materials of Construction	Polypropylene
Housing and Cap	As specified
Filter Media	PTFE coated silicone rubber
Septa	
Filtering Capacity	0.5 mL
Nominal Force Needed to Compress	Approximately 8 psi (0.6 bar)
Maximum Operating Temperature	120°F (50°C)

Ordering Information

Mini-UniPrep Syringeless Filtration System			
Standard Cap—Translucent Housing			
Catalog Number	Pore Size (µm)	Media	Quantity/Pack
UN203NPEAQU	0.2	PVDF	100
UN203NPENYL	0.2	Nylon	100
UN203NPEORG	0.2	PTFE	100
UN203NPEPES	0.2	PES	100
UN203NPEPP	0.2	PP	100
UN203NPUAQU	0.45	PVDF	100
UN203NPUDPP	0.45	DpPP	100
UN203NPUGMF	0.45	GMF	100
UN203NPUNYL	0.45	Nylon	100
UN203NPUORG	0.45	PTFE	100
UN203NPUPES	0.45	PES	100
UN203NPUPP	0.45	PP	100
UN503NPEAQU	0.2	PVDF	1000
UN503NPENYL	0.2	Nylon	1000
UN503NPEORG	0.2	PTFE	1000
UN503NPEPES	0.2	PES	1000
UN503NPEPP	0.2	PP	1000
UN503NPUAQU	0.45	PVDF	1000
UN503NPUDPP	0.45	DpPP	1000
UN503NPUGMF	0.45	GMF	1000
UN503NPUNYL	0.45	Nylon	1000
UN503NPUORG	0.45	PTFE	1000
UN503NPUPES	0.45	PES	1000
UN503NPUPP	0.45	PP	1000



Ordering Information

Catalog Number	Pore Size (µm)	Media	Quantity/Pack
Mini-UniPrep with Slit Septa for Automated Samples			
Slit Septa Cap—Translucent Housing			
US203NPEAQU	0.2	PVDF	100
US203NPENYL	0.2	Nylon	100
US203NPEORG	0.2	PTFE	100
US203NPEPES	0.2	PES	100
US203NPEPP	0.2	PP	100
US203NPUAQU	0.45	PVDF	100
US203NPUDPP	0.45	DpPP	100
US203NPUGMF	0.45	GMF	100
US203NPUNYL	0.45	Nylon	100
US203NPUORG	0.45	PTFE	100
US203NPUPES	0.45	PES	100
US203NPUPP	0.45	PP	100
US503NPEAQU	0.2	PVDF	1000
US503NPENYL	0.2	Nylon	1000
US503NPEORG	0.2	PTFE	1000
US503NPEPES	0.2	PES	1000
US503NPEPP	0.2	PP	1000
US503NPUAQU	0.45	PVDF	1000
US503NPUDPP	0.45	DpPP	1000
US503NPUGMF	0.45	GMF	1000
US503NPUNYL	0.45	Nylon	1000
US503NPUORG	0.45	PTFE	1000
US503NPUPES	0.45	PES	1000
US503NPUPP	0.45	PP	1000
Amber Mini-UniPrep for Light Sensitive Samples			
Standard Cap—Amber Housing			
UN203APEAQU	0.2	PVDF	100
UN203APENYL	0.2	Nylon	100
UN203APEORG	0.2	PTFE	100
UN203APEPES	0.2	PES	100
UN203APEPP	0.2	PP	100
UN203APUAQU	0.45	PVDF	100
UN203APUDPP	0.45	DpPP	100
UN203APUGMF	0.45	GMF	100
UN203APUNYL	0.45	Nylon	100
UN203APUORG	0.45	PTFE	100
UN203APUPES	0.45	PES	100
UN203APUPP	0.45	PP	100
Six Position Compressor Accessory			
CR0000006	N/A	N/A	1



Autovial®

Autovial Syringeless Filters—For Quick Sample Preparation

Whatman Autovial syringeless filters replace syringe-coupled filtration devices with a single, convenient disposable unit. Available in your choice of filtration media and consisting of a graduated filter barrel and plunger, Autovial speeds sample preparation—so you can get more work done in less time. Simply pour the sample directly into the filter barrel, insert the plunger and compress the unit. The filter barrel has a support stand to protect the slip luer outlet. Autovial syringeless filters are ideal for filtration into an autosampler vial or direct instrument injection, by connecting a needle to the slip luer outlet.

Features and Benefits

- Single unit convenience saves time. No assembly required—easier to load
- Choice of filter media. Compatible with a wide range of sample types
- Ideal for hazardous samples. Self contained device eliminates risk of filter pop-off
- Built-in air purge maximizes sample recovery
- Sterile option available to maintain sample integrity
- Unique prefilter design for difficult-to-filter samples



UniPrep®

UniPrep is a preassembled device for the filtration and storage of laboratory samples. The device is quick and easy to use and features a plunger, filter and vial in one unit.

UniPrep consists of a 5 mL outer test tube and a filter plunger with cap. The sample is placed in the outer tube and the plunger is pressed through the liquid. Positive pressure forces the filtrate up into the reservoir of the filter plunger, which can then be capped for sample storage. Filtered samples can be decanted into an autosampler vial or can be removed by drawing into a syringe for manual injection.

Features and Benefits

- Integral storage vial saves time and minimizes laboratory waste
- Built-in prefilter means even difficult samples are quick and easy to prepare
- Choice of membranes for wide sample compatibility

Applications

- Sample preparation
- Difficult-to-filter samples
- Quick filtration of samples



Typical Data

	Autovial 5	Autovial 12	UniPrep
Housing	Polypropylene	Polypropylene	Polypropylene
Filtration Area	1.7 cm ²	3.0 cm ²	0.3 cm ²
Capacity	5 mL	12 mL	1–5 mL
Volume 'Hold Up'	30 µL	140 µL	50 µL
Outlet Connection	Male slip luer	Male slip luer	—
Autoclavable	121°C for 20 minutes	121°C for 20 minutes	121°C for 20 minutes

Ordering Information

	Catalog Number	Membrane	Pore Size (µm)	Sterile	Quantity/Pack
Autovial 5	AV115NPUORG	PTFE	0.45	No	50
	AV115NPUNYL	Nylon	0.45	No	50
	AV115UGMF	GMF	0.45*	No	50
	AV115NPUAQU	PVDF	0.45	No	50
Autovial 12					
	AV125UGMF	GMF	0.45*	No	50
	AV125ENAO	Nylon	0.2	No	50
	AV125SNAO	Nylon	0.2	Yes	40
	AV125SORG	PTFE	0.2	Yes	40
	AV125SAQU	PVDF	0.2	Yes	40
	AV125UNAO	Nylon	0.45	No	50
	AV125EPP	PP	0.2	No	50
	AV125EORG	PTFE	0.2	No	50
	AV125UORG	PTFE	0.45	No	50
	AV125EAQU	PVDF	0.2	No	50
	AV125UAQU	PVDF	0.45	No	50
	AV125UCA	CA	0.45	No	50
	AV125NPUAQU**	PVDF	0.45	No	50
	AV125NPUPSJ**	PSU	0.45	No	50
	AV525UORG	PTFE	0.45	No	1000
	AV525UAQU	PVDF	0.45	No	1000
	AV525UNAO	Nylon	0.45	No	1000
	AV525BGMF	GF/B	1.0	No	1000
UniPrep					
	UN113EORG	PTFE	0.2	No	50
	UN113UORG	PTFE	0.45	No	50
	UN113UNYL	Nylon	0.45	No	50
	UN113UGMF	GMF	0.45*	No	50
	UN113EAQU	PVDF	0.2	No	50
	UN113UAQU	PVDF	0.45	No	50
	UN113ENYL	Nylon	0.2	No	50
Autovial/UniPrep Accessories					
UniPrep Stand	UN0000001	N/A	—	—	1

*Particle Retention Rating

** No prefilter