

Why filter your samples before analysis?

Prefiltering your sample and mobile phase solutions for particulates and microbial growth prior to analysis is critical to preventing column and frit blockage, undue wear on detectors, pumps, valves, injector seals, and abnormally high operating pressures. Non-filtered samples can also lead to non-reproducible analytical results and significant instrument downtime. Filtering every sample before injection is the easiest way to improve your results, to protect your system, and extend column lifetime.

Benefits of Using Chromfilter® Syringe Filters Daily:

- Less system downtime
- More consistent, reproducible results
- Protect Your Column and Equipment

Designed for your application:

- HPLC sample preparation
- Routine QC analysis
- Content uniformity
- Removal of protein precipitates
- Dissolution testing
- Food analysis
- Biofuel analysis
- Environmental samples

Application / Sample	Recommended Filter	First Alternative
HPLC and GC Sample Prep	Hydrophilic PVDF	Hydrophilic PTFE
Aggressive or Pure Organic Solvents	Hydrophobic PTFE	PTFE
Protein Analysis / Biological Samples	Hydrophilic PVDF	PES
High Particulate Loads	GF/ PP	GF + PTFE
Environmental Methods	GF/MCE	GF + NY
Food and Beverage	GF/ MCE	GF + NY
Clinical / Toxicology	Steriled Hydrophilic PVDF	Steriled PES
Dissolution Testing	GF	NY
Ion Chromatography	RC	PES
Trace Metals (ICP-MS, AAS)	RC	PES
Capillary Electrophoresis (CE)	RC	PES
Tissue Cultures, Media, Buffers	Hydrophilic PVDF	GF/PES

Enhanced Quality

No matter in manufacturing or testing, quality is a life of product as principal we are all continuously running after.

Raw material

All the membrane is imported for some leading company who is well known in producing membrane.

It is cut into some disc membrane that guarantee exceptional integrity when filtering some sample. Then through into non-gap sealing, virgin medical PP material from CK company is placed to contain all the disc membrane.

It has superior performance to prevent leak of sample solvent and can promise membrane area being used in a large filtration area.

QC control

After manufacturing it in shape, we still focus on testing it to judge whether it is OK and using strictly quality controlled system to forbidden shoddy product.

Every 85 in 100 can be sold to our customer in the end, 15 piece is to be died out.

The shelf life of packaged product is also monitored and controlled within our warehouses to ensure efficient stock rotation.

Chromfilter[®] syringe filters are manufactured by state-of-the-art production machines and must pass a battery of certification methods and tests. Both manufacturing and packaging processes adhere to the most current quality systems and methods such as:

- ISO
- DIN
- ASTM

Each piece through this system are selected after concerning 5 factor with critical specifications set for:

- Bubble point
- Burst pressure
- Membrane adsorption (protein)
- Flow rate
- UV extractables (by HPLC)





How to select your sample preparation device ?

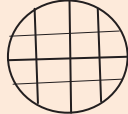
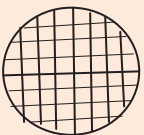
➤ Step 1: Choose the suitable membrane filtration medium Characteristics of samples

NY (Nylon)	For general sample and solvent filtration. Inherent hydrophilic characteristics and works well with all aqueous as well as most solvent-based samples. Excellent for most HPLC and GC sample and solvent preparations. Nylon exhibits a high non-specific affinity for proteins.	Hydrophilic
PTFE (Polytetrafluoroethylene)	Filtration of organic-based, highly acidic or basic samples and solvents. Widely used for chromatography, and for clarification of non-aqueous samples pre-wetting with alcohol when filtrate a aqueous samples then flushing with deionized water.	Hydrophobic
PES (Polyethersulfone)	Hydrophilic membrane with fast flow, high-throughput characteristics, with ultra-low protein binding. It is ideally suited for use in life sciences applications. Offers better chemical resistance than cellulose acetate. Recommended for filtering critical biological sampling, tissue culture media, additives, serum and buffers.	Hydrophilic
PVDF (Polyvinylidene fluoride)	As an universal hydrophilic membrane, Hydrophilic PVDF is widely used in chromatography for both clarification of aqueous and aggressive organic solutions samples. Due to its ultra-low protein and non-specific binding characteristics, hydrophilic membranes are an excellent choice for proteins, peptides and other biomolecules.	Hydrophilic

➤ Step 2: Choose the suitable diameter depending on the volume of samples

Sample Volume	Diameter
<10ml	13mm 
<100ml	25mm 

➤ Step 3: Select pore size based on the nature of your sample and chromatographic method

General aqueous or mixed organic samples prior to HPLC analysis with column packed with $> 3 \mu\text{m}$ particles. General clarification of GC, SFC, CE, and GPC samples.	0.45 μm 
Viscous samples or samples containing high levels of particulate matter.	
General aqueous or mixed organic samples prior to HPLC analysis with columns packed with $\leq 3 \mu\text{m}$ particles. Removal of fine particulate matter prior to GC, SFC, CE, and GPC samples. For sterile filtration, 0.22 μm is recommend.	0.22 μm 
Gas samples prior to GC. Liquid samples prior to UHPLC or LC/MS. Other particulate-sensitive methods.	
Viscous samples such as serum, plasma, or other biological matrices. Solutions with high particulate load (e.g., some environmental or food and beverage applications).	0.45 μm filter with Glass Fiber prefilter

Chromfilter® Syringe Filter

are designed for efficient and cost-effective rapid filtration of almost any solution prior to analysis, and are optimized for superior flow rates and high throughput.

The classic range is available in all of the major membranes including Nylon, Hydrophilic PTFE, Hydrophobic PTFE, PES, MCE and PVDF, which are supplied in 13mm id, 25mm id formats in virgin medical polypropylene housings.

Features

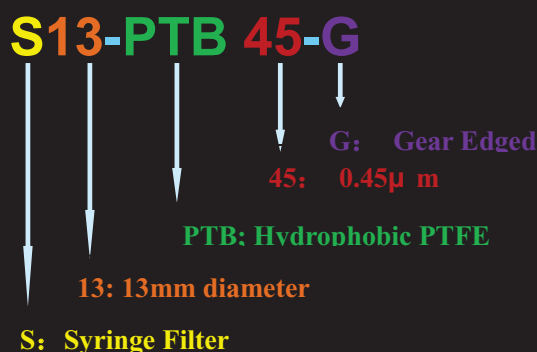
- ✓ *Embossed character:* Gear edged for easily handling; color coded for easy telling the filter membrane and pore size
- ✓ *Application Compatibility:* Broad range of filtration media meets diverse application needs
- ✓ *HPLC certified for low levels of UV absorbing extractables*
- ✓ *Sterile:* Filters can be purchased pre-sterilized by Gamma radiation and individually packaged

Technical specifications

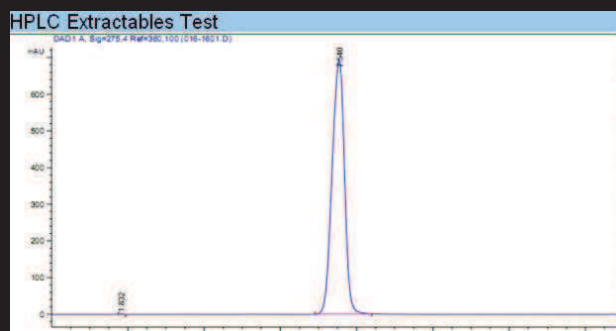
Parameters	13mm id	25mm id
Housing Material	Virgin Medical Polypropylene	
Effective Filtration Area (cm ²)	0.8	4.08
Pore Size (µm)	0.22, 0.45, ... (0.8, 1.0, 3.0)	
Holdup Volume (µl)	<25	<100
Sample Volume (ml)	<10	<100
Inlet Connection	Female luer lock (FLL)	
Outlet Connection	Male slip luer (MSL)	
Maximum Operating Temperature	50 degree	50 degree
Maximum Operating Pressure (bar)	100 psi (6.9 bar) at 20 °C	89 psi (6.0 bar) at 20 °C

Ordering information :

A: How to order?



Validated HPLC Performance



Agilent Technologies 1200, Column: C18 UV = 254 nm
 Mob.phase:MeOH/H₂O:20:80, Temperature: 25°C, Flow
 rate:0.8ml/min, sample:2mg/ml Bergenin(in Methanol)

Core Competition

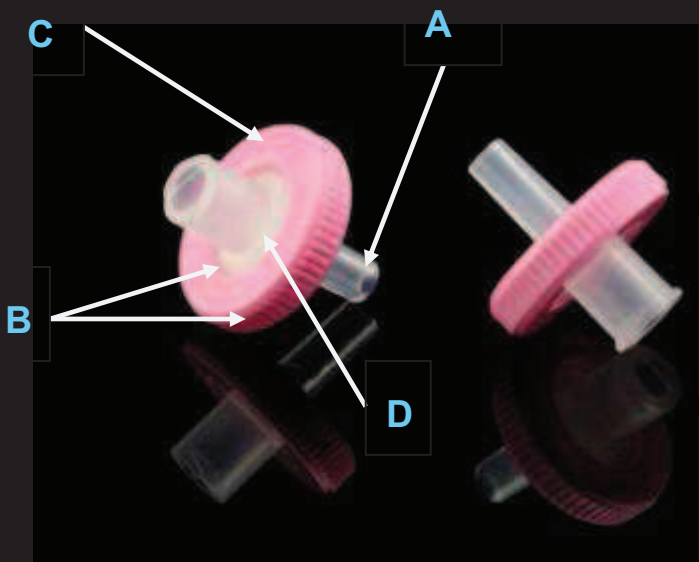
Quality: Reliable, reproducible, and contaminate-free syringe filter

Delivery: Guarantee 7-10 business days.

OEM service : The unique filter design, with LOGO printing on filter and package customization.

Value-added service: Big account discount, Bidding support.

Color Coded, Gear Edged, 13mm/25mm					
Pore Size	Nylon	PES	MCE	Hydrophobic PTFE	Hydrophilic PVDF
0.22µm	 Light green	 yellow	 green	 orange	 pink
0.45µm	 white	 blue	 Light blue	 red	 purple



A: Medical Grade PP Housing

Offers the most inert syringe filter and helps eliminate unwanted secondary interactions with the filter housing

B: Injection molding in one

Offers the most pressure resistance of the syringe filter, as it is injection molding in one, better than normal Ultrasonically Welded.

C: Identification

Membrane type and pore size are clearly identified by color coded.

D: Better membrane media

All raw membrane import from famous brand such as Membrana, GE, Donalson...from German, US or Japan.

Order Information

Filter Media	Diameter(mm)	PoreSize(μ m)	Package	Cat. No.
NY	13	0.22	100	S13-NY22-G
	13	0.45	100	S13-NY45-G
	25	0.22	100	S25-NY22-G
	25	0.45	100	S25-NY45-G
MCE	13	0.22	100	S13-MC22-G
	13	0.45	100	S13-MC45-G
	25	0.22	100	S25-MC22-G
	25	0.45	100	S25-MC45-G
PTFE (Hydrophobic)	13	0.22	100	S13-PTB22-G
	13	0.45	100	S13-PTB45-G
	25	0.22	100	S25-PTB22-G
	25	0.45	100	S25-PTB45-G
PTFE (Hydrophilic)	13	0.22	100	S13-PTL22-G
	13	0.45	100	S13-PTL45-G
	25	0.22	100	S25-PTL22-G
	25	0.45	100	S25-PTL45-G
PES	13	0.22	100	S13-PS22-G
	13	0.45	100	S13-PS45-G
	25	0.22	100	S25-PS22-G
	25	0.45	100	S25-PS45-G
PVDF (Hydrophilic)	13	0.22	100	S13-PVL22-G
	13	0.45	100	S13-PVL45-G
	25	0.22	100	S25-PVL22-G
	25	0.45	100	S25-PVL45-G