

Syringe Filters

CHROMAFIL™ Disposable Syringe Filters - Quick Filtration of Liquid Samples

CHROMAFIL® Disposable Syringe Filters are used for filtration of suspended matter from liquid samples. CHROMAFIL® filters are available with pore of 0.2 µm to 1.0 µm. They feature:

- Polypropylene Housing
 - Better solvent stability compared to acrylate and polystyrene filters
- Shells ultrasonically sealed, not glued
 - No extractable components from glues
- Filtration in both directions possible
 - The liquid cannot bypass the membranes.
- Luer lock on side of entry
 - Safe connection on the "high pressure" side
- Luer exit
 - Standard luer for 3 mm and 25 mm filters, minispikes luer with low dead volume and small OD for 15 mm filters
- Deflector
 - The stream of liquid is broken and distributed, and does not directly hit the membrane: this prevents rupture of the membrane
- Star-shaped distribution device
 - The liquid is evenly distributed to the whole membrane surface: This results in a better utilization of the total area. The filter is not plugged up rapidly, providing high flow efficiency.
- Color Coded
 - Filter with 0.2 µm pores have a yellow upper shell and filters with 0.45 µm pores are colorless. The different membrane types are distinguished by different colors.
- Low Dead Volume
 - ~120 µl for 25 mm Ø, 12 µl for 15 mm Ø, 5 µl for 3 mm Ø



With CHROMAFIL®, rapid purification and removal of particles from liquid or gas samples is simple: place the filter on the syringe and you are ready for filtration. Special manipulations are not required. Contamination of sensitive instrumentation by solid impurities can be avoided, thus increasing the lifetime of chromatographic columns and equipment.

Inquire about bulk packs.

Do's and Don'ts

We recommend the following pointers for optimal filtration results using CHROMAFIL® filters:

- Before sample filtration, we recommend either discarding the first 1 ml or rinsing the filter unit with 1 ml of primary solvent
- Draw ~ 1 ml air into the syringe before filling it. This air helps to minimize the remaining fluid in the filter.
- Start with gentle pressure at the beginning of the filtration. This helps assure maximum throughput. As the filter accumulates particles, filtration becomes more difficult and the pressure will increase on the filter.
- To avoid housing rupture, change filters when resistance becomes excessive.
- Do not use CHROMAFIL® syringe filters for direct patient care applications; they are designed for laboratory use only!
- Do not use syringes smaller than 10 ml; the pressure generated may exceed the 6 bar limit of the filter
- Do not use at temperatures about 55° C (131° F)
- Do not reuse the filter

| Cat. # | Description | Pore Size | Diameter | Color Top/Bottom | Material | Qty/Pkg |
|--------|--------------------------------------|-----------|----------|--------------------|----------|---------|
| 729204 | CHROMAFIL® Cellulose Mixed Ester | 0.45 µm | 25 mm | Colorless/Labelled | MV | 100 |
| 729227 | CHROMAFIL® Cellulose Acetate | 0.45 µm | 25 mm | Colorless/Labelled | CA | 100 |
| 729231 | CHROMAFIL® Regenerated Cellulose | 0.45 µm | 25 mm | Colorless/Labelled | RC | 100 |
| 729213 | CHROMAFIL® Polyamide Nylon | 0.45 µm | 25 mm | Colorless/Labelled | PA | 100 |
| 729205 | CHROMAFIL® Teflon | 0.45 µm | 25 mm | Colorless/Labelled | PTFE | 100 |
| 729219 | CHROMAFIL® Polyvinylidene Difluoride | 0.45 µm | 25 mm | Colorless/Labelled | PVDF | 100 |
| 729241 | CHROMAFIL® Polyethersulfone | 0.45 µm | 25 mm | Colorless/Labelled | PES | 100 |
| 729220 | CHROMAFIL® Polyester | 0.45 µm | 25 mm | Colorless/Orange | PET | 100 |
| 729228 | CHROMAFIL® Glass Fiber | 1.0 µm | 25 mm | Colorless/Orange | GF | 100 |

For more selections and sizes, visit our website or contact your personal Product Specialist.

This table lists the chemical compatibility of our CHROMAFIL® materials. The chemical compatibility depends on several parameters such as time, pressure and concentration. In most cases, CHROMAFIL® filters will have only short contact with a solvent. In these cases they may be used despite limited compatibility. For example, a PTFE filter with PP housing does not liberate any UV-detectable substances during filtration of 5 ml THF, although PP shows only limited resistance towards THF.

| SOLVENT | MATERIAL | | | | | | | | | |
|------------------------------|----------|----|----|----|------|------|-----|-----|----|----|
| | MV | CA | RC | PA | PTFE | PVDF | PES | PET | GF | PP |
| Acetaldehyde | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊕ |
| Acetic acid, 100% | ⊖ | ⊖ | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Acetone | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | | | ⊕ | ⊕ | ⊕ |
| Acetonitrile | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Ammonia, 25% | ⊖ | ⊖ | ⊕ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Benzene | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊕ |
| n-Butanol | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Cyclohexane | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Dichloromethane | ⊕ | ⊖ | ⊕ | ⊖ | ⊕ | ⊕ | ⊖ | ⊕ | ⊕ | ⊖ |
| Diethyl ether | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Dimethylformamide | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ |
| 1,4-Dioxane | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊖ | ⊕ | ⊕ | ⊕ |
| Ethanol | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Ethyle acetate | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Ethylene glycol | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Formic acid, 100% | ⊕ | ⊖ | ⊕ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Hydrochloric acid, 30% | ⊖ | ⊖ | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊖ | ⊕ | ⊕ |
| Methanol | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Nitric acid, 65% | ⊖ | ⊖ | ⊖ | ⊖ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊖ |
| Oxalic acid, 10% aqueous | ⊕ | ⊖ | ⊕ | ⊖ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊕ |
| Petroleum ether | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Phosphoric acid, 80% | ⊖ | ⊖ | ⊕ | ⊖ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊕ |
| Potassium hydroxide, 1 mol/l | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| 2-Propanol | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Sodium hydroxide, 1 mol/l | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Tetrachloromethane | ⊕ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊕ |
| Tetrahydrofuran | ⊖ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊖ | ⊕ | ⊕ | ⊕ |
| Toluene | ⊕ | ⊖ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| Trichloroethylene | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊕ |
| Trichloromethane | ⊕ | ⊖ | ⊕ | ⊖ | ⊕ | ⊕ | ⊖ | ⊕ | ⊕ | ⊖ |
| Urea | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | | ⊕ | ⊕ | ⊕ |
| Water | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |

⊕ Resistant

⊖ Not Resistant

⊕ Limited Resistance

Data Not Guaranteed

MV - Cellulose Mixed Esters

CA - Cellulose Acetate

RC - Regenerated cellulose

PA - Polyamide

PTFE - Polytetrafluoroethylene (Teflon)

PVDF - Polyvinylidene difluoride

PES - Polyethersulfone

PET - Polyester

GF - Glass Fiber

PP - Polypropylene (housing material)

