

## Syringe Filters

With their low extractables and low binding membranes, our syringe filters are ideal for sensitive instrumental analysis including gas, liquid and ion chromatography. A wide range of chemical compatibility enables their use with virtually any sample composition.

- Increased column lifetime
- Less system down time
- Consistent, reproducible results

In today's environment, rapid and simple sample preparation is a must. Our syringe filters are designed for higher flow rates and throughputs than those of competing products.

No matter the sample type, we offer filtration products to meet your demanding requirements. Water, wastewater, soil and sludge, and pollution control samples are especially challenging. At every stage of the drug discovery process target compounds must be isolated, purified, and prepared prior to testing.

Difficult samples such as serum, urine and other physiological fluids are easily filtered and clarified using our syringe filters. Removal of particulate matter to sub-micron levels is critical before any clinical sample is injected into an HPLC, GC or mass spectrometer. At every stage of toxicology, samples must be prepared prior to testing.

Food safety is more important than ever and decreasing detection limits are making analysis even more challenging. Accurate and reliable testing is critical to ensure food safety. Syringe filters are routinely used in preparation for analysis of pesticides, herbicides, fungicides, flavours and fragrances. For samples with large amounts of particulate and/or large fibrous matter, use a glass fibre prefilter.



### Sample Prep for Chromatography

#### Applications

- General particulate removal
- GC
- IC
- HPLC
- UHHPLC
- Dissolution testing

#### Membranes

**PES**- Fast flow and low protein binding

**Hydrophilic PTFE**- Mild organics and aqueous solutions; low binding and extractables

**Nylon**- Aqueous or organic solutions

**PTFE** - Organic solvents (hydrophobic membrane)

### Viscous Filtration/ High Particulate

#### Applications

- General particulate removal
- Analytical Sample preparation
- Wine Analysis

#### Membranes

**Use filters with prefilters for higher throughput**

**Hydrophilic PTFE**- organics and aqueous solutions

**Nylon**- Aqueous or organic solutions

**PTFE** - Organic solvents (hydrophobic membrane)

**PVDF** - For mild organic and aqueous solutions

### Laboratory Filtration

#### Applications

- Particulate and clarification removal

#### Membranes

**Use filters with prefilters for higher throughput**

**NC**- Mixed Cellulose esters (MCE)- Aqueous solutions

**PVDF** - ultra-low protein binding; mild organic and aqueous solutions

### Sterile Filtration

#### Applications

- Biological solutions
- Buffers
- Tissue culture media/additives

#### Membranes

**PES**- Fast flow and low protein binding

**PVDF** - Ultra-low protein binding

**Hydrophilic PTFE**- Wide-ranging chemical compatibility

**NC**- Mixed Cellulose esters (MCE)- general purpose

## 25mm Syringe Filters

Our syringe filters 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. We offer a wide variety of membranes ideal for any application. The housing attaches to any standard Luer lock syringe, so the sample can easily be pushed through the membrane with minimal pressure. The result is a particulate-free eluent that is ready for use with HPLC, GC, or other analytical techniques.



| Specifications                          |   |
|---|---|
| Housing Material                        | 100% homopolymer Polypropylene- no filling agents or release agents |
| Prefilter Material                      | Borosilicate Glass 1um  |
| Effective Filtration Area               | 3.9 cm <sup>2</sup>   |
| Sample Volume                           | < 150 mL  |
| Inlet / Outlet Connections              | Inlet = Female Luer Lock, Outlet = Male Luer Slip                   |
| Typical Hold Up Volume (no Prefilter)   | < 125 uL  |
| Typical Hold Up Volume (with Prefilter) | <150 uL   |
| Maximum Operating Temperature           | 55° C (131° F)  |
| Maximum Operating Pressure              | 60 psi  |

### Typical Syringe Filter Applications

- **PES**- Protein and enzyme filtration sterilization
- **PTFE (Hydrophilic)**- Mild organics and aqueous solutions; low binding and extractables
- **Nylon**- Aqueous or organic solutions
- **PTFE (Hydrophobic)** - Organic solvents
- **CA** - Aqueous Solutions
- **PVDF** - Amino Acid Analysis
- **Nitrocellulose** - Microbiological analysis

Glass prefilters give you higher throughput for viscous or samples which are highly dirty.

|                        | Size            | 25mm  |        | 25mm with Prefilter | 25mm with Prefilter |
|------------------------|-----------------|-------|--------|---------------------|---------------------|
|                        | Qty Per package | 100   | 1000   | 100/PKG             | 1,000/PKG           |
| Nylon                  | .2um            | NY02  | NY022  | NY0225P             | NY0225P1            |
|                        | .45um           | NY45  | NY452  | NY4525P             | NY4525P1            |
| Cellulose Acetate      | .2um            | CA02  | CA022  | CA0225P             | CA0225P1            |
|                        | .45um           | CA45  | CA452  | CA4525P             | CA4525P1            |
| Polypropylene          | .2um            | PP02  | PP022  | PP0225P             | PP0225P1            |
|                        | .45um           | PP45  | PP452  | PP4525P             | PP4525P1            |
| PTFE - Hydrophobic     | .2um            | PT02  | PT022  | PT0225P             | PT0225P1            |
|                        | .45um           | PT45  | PT452  | PT4525P             | PT4525P1            |
| PTFE - Hydrophilic     | .2um            | PTL02 | PTL022 | PTL0225P            | PTL0225P1           |
|                        | .45um           | PTL45 | PTL452 | PTL4525P            | PTL4525P1           |
| PES                    | .2um            | PE02  | PE022  | PE0225P             | PE0225P1            |
|                        | .45um           | PE45  | PE452  | PE4525P             | PE4525P1            |
| Nitrocellulose - (MCE) | .2um            | NC02  | NC022  | NC0225P             | NC0225P1            |
|                        | .45um           | NC45  | NC452  | NC4525P             | NC4525P1            |
| PVDF                   | .2um            | PV02  | PV022  | PV0225P             | PV0225P1            |
|                        | .45um           | PV45  | PV452  | PV4525P             | PV4525P1            |

## 13mm and 17mm Syringe Filters

| Specifications                |   |
|-------------------------------|---|
| Housing Material              | 100% Polypropylene                                      |
| Effective Filtration Area     | 13mm = 0.8 cm <sup>2</sup> , 17mm = 1.0 cm <sup>2</sup> |
| Sample Volume                 | 13mm = < 10 mL, 17mm = <12 mL                           |
| Inlet / Outlet Connections    | Inlet = Female Luer Lock<br>Outlet = Male Luer Slip     |
| Typical Hold Up Volume        | 13mm = < 15 uL, 17mm = <18uL                            |
| Maximum Operating Temperature | 55° C (131° F)  |
| Maximum Operating Pressure    | 13mm = 100 psi, 17mm = 130 psi                          |



|                        | Size  | 13mm     |            | 17mm     |            |
|------------------------|-------|----------|------------|----------|------------|
|                        |       | 100 Pack | 1,000 Pack | 100 Pack | 1,000 Pack |
| Nylon                  | .2um  | 13NY0    | 13NY025    | 17NY0    | 17NY025    |
|                        | .45um | 13NY4    | 13NY455    | 17NY4    | 17NY455    |
| Cellulose Acetate      | .2um  | 1302CA   | 1302CA5    | 17CA0    | 17CA025    |
|                        | .45um | 1345CA   | 1345CA5    | 17CA4    | 17CA455    |
| Polypropylene          | .2um  | 1302PP   | 1302PP5    | 17PP0    | 17PP025    |
|                        | .45um | 1345PP   | 1345PP5    | 17PP4    | 17PP455    |
| PTFE - Hydrophobic     | .2um  | 1302PT   | 1302PT5    | 17PT0    | 17PT025    |
|                        | .45um | 1345PT   | 1345PT5    | 17PT4    | 17PT455    |
| PTFE - Hydrophilic     | .2um  | 1302PL   | 1302PTL5   | 17PTL0   | 17PTL025   |
|                        | .45um | 1345PL   | 134PTL5    | 17PTL4   | 17PTL455   |
| PES                    | .2um  | 1302PE   | 1302PE5    | 17PE0    | 17PE025    |
|                        | .45um | 1345PE   | 1345PE5    | 17PE4    | PE4525P1   |
| Nitrocellulose - (MCE) | .2um  | 1302NC   | 1302NC5    | 17NC0    | 17NC025    |
|                        | .45um | 1345PNC  | 1345NC5    | 17NC4    | 17NC455    |
| PVDF                   | .2um  | 1302PV   | 1302PV5    | 17PV0    | 17PV025    |
|                        | .45um | 1345PV   | 1345PV5    | 17PV4    | 17PV455    |

## Sterile Syringe Filters

| Specifications                |   |
|-------------------------------|---|
| Housing Material              | 100% Polypropylene                                  |
| Effective Filtration Area     | 3.9 cm <sup>2</sup>                                 |
| Sample Volume                 | < 150 mL  |
| Inlet / Outlet Connections    | Inlet = Female Luer Lock<br>Outlet = Male Luer Slip |
| Typical Hold Up Volume        | < 125 uL  |
| Maximum Operating Temperature | 55° C (131° F)                                      |
| Maximum Operating Pressure    | 60 psi  |



|                        | Size  | 25mm    |          |
|------------------------|-------|---------|----------|
|                        |       | 100     | 1000     |
| Nylon                  | .2um  | NY0225T | NY0225T1 |
|                        | .45um | NY4525T | NY4525T1 |
| Cellulose Acetate      | .2um  | CA0225T | CA0225T1 |
|                        | .45um | CA4525T | CA4525T1 |
| PES                    | .2um  | PE0225T | PE0225T1 |
|                        | .45um | PE4525T | PE4525T1 |
| Nitrocellulose - (MCE) | .2um  | NC0225T | NC0225T1 |
|                        | .45um | NC4525T | NC4525T1 |