

### HPLC Certified

High-quality and cost-effective Syringe Filters are available in a broad range of membrane materials with sterile and non-sterile packaging options.



### FEATURES

- Disposable
- Luer-Lok™ and pressure fitting
- Ultrasonically bonded for reliability
- Filter media type clearly inscribed on barrel
- Excellent unit-to-unit and lot-to-lot reproducibility and consistency
- High purity virgin polypropylene housing, no dyes or pigments added
- Every unit type is available as an individually wrapped gamma sterilized pack
- Unique concentric funnel shaped barrel increases volume and decreases back pressure

### APPLICATIONS

A wide range of filtration media is available to meet diverse application needs. See the inside spread for a Filtration Media Application Guide.

### SIMPLE PRODUCT SELECTION

#### Evaluate sample:

Determine chemical compatibility, volume and need for prefiltration



#### Determine level of prefiltration necessary:

in filter unit vs. prefilter unit in series for coarse precipitants.



#### Choose filter media type:

Aqueous: Nylon, MCE, CA  
Nonpolar: Nylon, PTFE, PVDF  
Protein: PVDF, PES



#### Choose barrel diameter:

<10 mL: 13 mm diameter  
<100 mL: 25 mm diameter



#### Choose initial or secondary retention target:

0.45 µm or 0.20 µm

# Syringe Filters

## APPLICATIONS

Filtration Media / Application Guide (hydrophobic or hydrophilic)

Glass microfiber filter media - prefilter versions available in all variations

### Mixed Cellulose Esters (MCE) - Hydrophilic

- This membrane is recommended for all filtrations in aqueous or polar media, bacteria filtration
- Ideal when maximum protein recovery in filtrate is crucial
- Used for filtration and inspection of gas, oil and alcohol particulate and bacteria
- Combined with glass microfiber prefilter, ideal for tissue culture media and sensitive biological samples
- Sample filtration - prefilter increases yield

### Cellulose Acetate (CA) - Hydrophilic

- Very low binding capacity for proteins
- Material is nitrate-free making it suitable for groundwater & EPA ASTM's
- For filtration under sterile conditions
- Filtration and clarification of biological fluids, sterilization of media additives and serum
- Sample preparation of aqueous solutions
- For applications requiring maximum sample recovery
- Sample preparation of protein-based HPLC solutions
- Designed to sterilize and remove particulates from even the most viscous proteinaceous samples
- Filtration of tissues culture media with glass fiber prefilter

### Polyamide/Nylon (PA) - Hydrophilic

- Hydrophilic material; it is recommended for filtration of aqueous or organic/aqueous medium polar liquids
- Commonly used for general laboratory filtration and filtration of HPLC and GC samples prior to injection
- Filtration of aqueous and organic-aqueous polar medium liquids
- Dissolution sample analysis
- Suitable for use with high pH samples
- Since it binds proteins it is NOT suitable for protein recovery applications
- With microfiber prefilter higher absorption capacity for contamination

### Polyethersulfone (PES) - Hydrophilic

- High filtration flow rates
- An inherently low affinity for proteins
- Low extractables
- Introduction of additives into tissue culture vessel
- Certified for Ion Chromatography
- Final filtration of bacteriophage and infusion solutions
- Tissue culture, proteins, buffer and nucleic acids filtration
- Ideal for applications requiring maximum sample recovery
- Filter hybridization solutions and probe to reduce backgrounds
- Food, beverages and ultra pure water final filtration

## APPLICATIONS

Filtration Media / Application Guide (hydrophobic or hydrophilic)

Glass microfiber filter media - prefilter versions available in all variations

### Polyvinylidene Difluoride (PVDF) - Hydrophobic

- This membrane features a stability and hydrophobic interactions similar to PTFE
- Recommended especially for filtration of water-soluble oligomers and polymers, e.g. protein solutions
- Can also be used for the filtration of hydrophobic substances in different organic solvents

### Polytetrafluoroethylene (PTFE) - Hydrophilic or Hydrophobic

- PTFE membranes are inherently hydrophobic; they are ideal for the filtration of nonpolar liquids and gases
- Very resistant to solvents as well as acids or bases
- Can be made more hydrophilic by flushing with alcohol, followed by water
- Used for filtering and de-gassing chromatography solvents
- Permits optimal utilization of small sample volumes
- Excellent chemical compatibility for filtering harsh chemicals that destroy other membrane materials
- Moisture barrier for venting applications and vacuum pump line protection
- Ideal for aerosol sampling
- Filter viscous organic-based HPLC samples
- Glass microfiber prefilter raises absorption capacity and loading
- After pre-wetting with alcohol, may be used for fine particle removal of aqueous and mild organic solutions in Ion Chromatography

### Glass Fiber Prefilters

- For viscose solutions or turbid liquids
- Ideal for use as a prefilter in series with other syringe filters
- Glass microfiber filter media enclosed in this series is binderless 1.0  $\mu\text{m}$  retention
- Reduces clogging of the membrane, so ideal as a prefilter to increase throughput and flow rate
- Ideal for dissolution testing and general filtration
- Applicable to all membrane types, allowing higher flow rates
- Good compatibility with strong acids, bases and organic solvents
- **Similar in composition to I.W. Tremont binderless borosilicate glass microfiber media available as disks and sheets**

Filter media type  
and retention  
marked on barrel.



# Syringe Filters

## TECHNICAL SPECIFICATIONS:

### Typical Physical Characteristics:

	13 mm diameter barrel	25 mm diameter barrel
<b>Surface area (cm<sup>2</sup>):</b>	0.65	3.90
<b>Sample volume (ml):</b>	<15	<105
<b>Maximum pressure (bar):</b>	45	90
<b>Hold up volume (μl):</b>	8.5	28.5
<b>Connector inlet:</b>	Luer-Lok™	Luer-Lok™
<b>Connector outlet:</b>	luer-slip (non-barb)	luer-slip (non-barb)

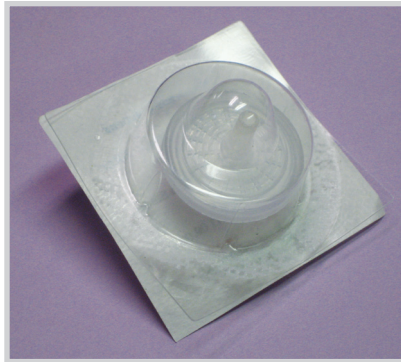
## ORDERING INFORMATION

For the complete listing of sterile and non-sterile syringe filters available in mixed cellulose esters, cellulose acetate, polyamide/nylon, polyethersulfone, polyvinylidene difluoride, polytetrafluoroethylene, and glass fiber prefilters, please refer to our website at [www.iwtremont.com](http://www.iwtremont.com).

## COMMON COMPETITIVE EQUIVALENTS

For the complete up-to-date listing of competitive product alignments, please visit our website at [www.iwtremont.com](http://www.iwtremont.com).

## PACKAGING OPTIONS



Sterile product individually blister packed.



Non-sterile product is polybagged.



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**Technical and Specialty Papers**

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