Ahlstrom-Munksjö's microfiltration offering

Ahlstrom-Munksjö's microfiltration range offers a great value for routine applications.

Ahlstrom-Munksjö has developed a value offer for mictrofiltration. Syringe filters and membrane filters of this range are the perfect items for general filtration, particle removal, liquid filtration and many more applications.

APPLICATIONS

- **Selection of membrane and filter types and diameter**
- **Hydrophilic and Hydrophobic filtration layers**
- **Filtration layers with different protein binding capacity**

Syringe Filters

Ahlstrom-Munksjö offers syringe filters for routine filtration applications and for customers looking for excellent quality/price ratio.

This range includes the most useful diameters and membrane types to allow reliable work in many applications.

Typical grade properties

Membrane	Diameter mm	Pore Size µm	Pack of 100
Glass Fiber	25	1.0	750027
MCE	25	0.2	770623
MCE	25	0.45	770625
Nylon	13	0.2	770213
Nylon	13	0.45	770215
Nylon	25	0.2	770221
Nylon	25	0.45	770225
PES	25	0.2	770523
PES	25	0.45	770525
PTFE	13	0.2	770711
PTFE	13	0.45	770715
PTFE	25	0.2	770722
PTFE	25	0.45	770723
PTFE	33	0.2	Pack of 50 - 770726
PVDF	25	0.2	770321
PVDF	25	0.45	770326

Please contact Ahlstrom-Munksjö for item availability and stock.
Additional items are available upon request, minimum order quantity may apply.

Syringe filters are often used to remove particles from a sample. They can also purify a solvent or a sample prior to analysis by HPLC or other techniques involving expensive instruments.

Ahlstrom-Munksjö's syringe filters can be used instead of paper filters where small volumes are involved and the absorption of a standard filter paper is a source of significant loss.

Membrane Filters

Ahlstrom-Munksjö offers its membrane filters for routine filtration applications to customers looking for excellent quality.

Membrane filters have a wide range of application from sample purification to microbiology.

They offer the advantages of a well defined pore size combined with a practical format which can be used in many filtration or purification set-up.

Some membranes not membrane can be sterilized, giving access to even more biological or sterilization applications.

Membrane	Pore Size µm	Filter Diameter mm	Sterile	Pack of 100
MCE - white with black grid	0.45	47	Yes	776644
MCE - plain	0.45	47	No	775244
Nylon - plain	0.45	47	No	785002

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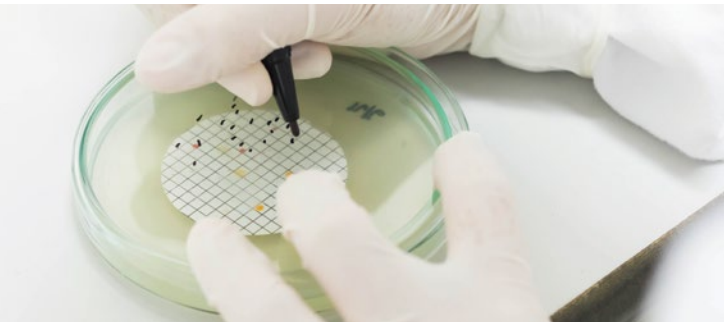
Sterile Gridded CN (MCE) Membranes

Ahlstrom-Munksjö gridded membrane filters are made of cellulose nitrate (cellulose mixed ester) packaged in sterile, sealed sleeves. They can be used for colony counting, particle testing, and microscopy. The white membrane with a black grid is available in individual sleeves or in strips of 100 for use in standard automatic feeder equipment. Also available in individually packaged sterile black membrane with a white grid.



PM 2.5 PTFE membrane with PP ring

Ahlstrom-Munksjö offers the highest quality filters ideal for air pollution control. In addition to a very high quality range of glass and quartz microfiber filters used to collect particles and aerosols, Ahlstrom-Munksjö offers pure PTFE membrane supported by a polypropylene ring.

Diameter	46.2 mm ± 0.2 mm
Pore size	2 µm
Aerosol collection (0.3 µm)	> 99.7%
Membrane thickness	40 µm ± 5 µm
Support ring thickness	0.4 mm ± 0.02 mm
Part number	776446

KEY FEATURES

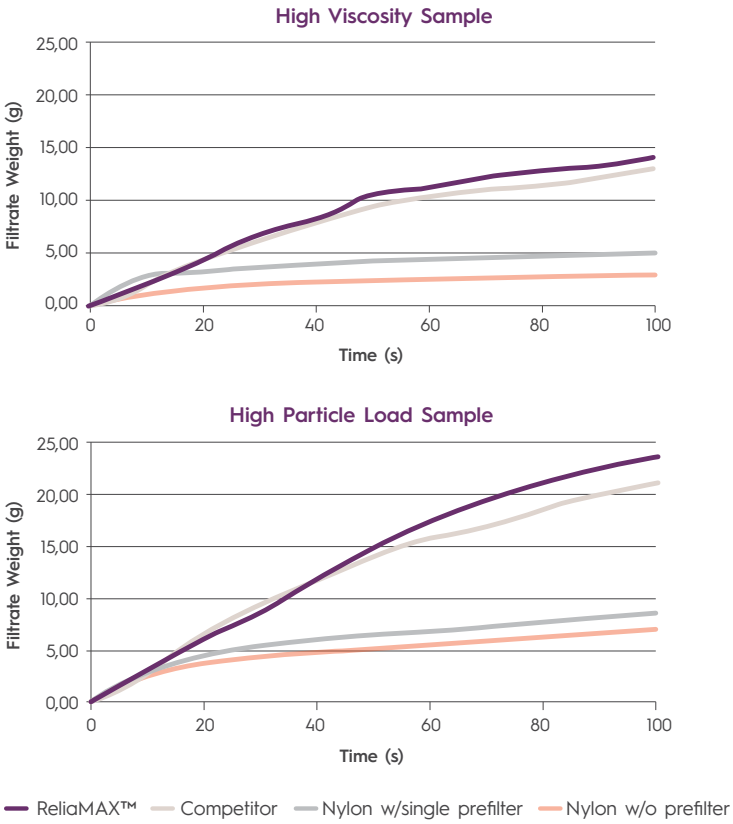
- **Conforms to US EPA PM2.5 method (40 CFR,part 50 Appendix L)**
- **Manufactured under clean room condition class 100 000**
- **Tested for Alkalinity (section 2.12 EPA/600/R-94/038b): <25µeq/g of filter**
- **Tested for Drop Test weight stability (section 2.12 EPA/600/R-94/038b): <20µg**
- **Tested for Temperature weight stability (section 2.12 EPA/600/R-94/038b): <20µg**
- **Tested for Hygroscopic stability (section 2.12 EPA/600/R-94/038b): <10µg**
- **High lot-to-lot stability and well defined filter dimensions**
- **Chemically resistant**

ReliaMAX™ High Capacity Syringe Filters

Ahlstrom-Munksjö's ReliaMAX™ syringe filters contain prefilters specifically developed to increase the efficiency of laboratory microfiltration applications by reducing the number of steps needed to process samples and solutions with either a high particle load or a high viscosity if standard syringe filters are used. Ahlstrom-Munksjö's expertise in creating filtration media is designed into this advanced syringe filter which contains two of our microfiber glass filter media providing a total of three layers of decreasing porosity to better capture larger particles before they reach the more easily blocked polymeric membrane filter.

APPLICATIONS

- **Clarification of solutions**
- **Removal of particles**
- **Sample preparation**



BENEFITS OF MULTI-LAYER PREFILTERS:

- **High particle holding capacity – larger amount of particles can be captured prior to clogging the membrane**
- **Fast initial flow – the specific structure of ReliaMAX™ offers excellent flow with viscous samples**
- **Low resistance to pressure – fast and efficient filtration even with low pushing pressure**

Internal testing shows that ReliaMAX™'s filter design performs better than syringe filters containing a membrane with a single layer prefilter and comparably with competitive syringe filters containing multi-layer prefilters when filtering standardized solutions.

Membrane	Diameter mm	Pore size µm	Hold-up Volume µl	Housing	Inlet/Outlet	Pack of 100
Nylon	25	0.2	<400 µl	PP	Female Luer Lock / Male Luer Slip	7X7531
Nylon	25	0.45	<400 µl	PP	Female Luer Lock / Male Luer Slip	7X7532
PTFE	25	0.2	<400 µl	PP	Female Luer Lock / Male Luer Slip	7X7539
PTFE	25	0.45	<400 µl	PP	Female Luer Lock / Male Luer Slip	7X7512

Guide for microfiltration applications

Material selection

NYL - Nylon (Polyamide):

Hydrophilic and widely used in both aqueous and organic solvent filtration applications. Well suited for clarification of buffers and nutrient media with a low level of extractibles.

PTFE - Polytetrafluoroethylene:

Permanently hydrophobic filter material, very suitable for air and gas particulate filtration. Extremely resistant to aggressive solvents and acids (pH 1-14). Must be pre-wetted with ethanol before the filtration of aqueous media.

CA - Cellulose Acetate:

Low protein-binding, well suited for sterile filtration and clarification of aqueous solutions, nutrient media, buffers, and sera. Also compatible with alcohol and oil. These hydrophilic membranes offer high and consistent flow rates.

MCE - Mixed Cellulose Esters (Cellulose Nitrate):

Set standard in both analytical and microbiological filtration. Available in a wide range of pore size and is well suited for microbial analysis in water, food and beverage application.

PES - Polyether Sulfone:

Uniform pore structure with high mechanical stability and chemical resistance. Offers excellent flow rate for critical filtration situations where high throughput is required with the lowest protein adsorption. First choice for the filtration of biological and pharmaceutical specimens.

PVDF - Polyvinylidene fluoride:

Resistant to solvents, good heat resistance properties and low protein binding. Applications include the preparation of HPLC samples and sterilization applications. PVDF has the advantage of being less brittle than MCE and can be used in similar applications despite a higher protein binding capacity.