



Better **Membrane**, Better **Filtration**

Lab Microfiltration Series



VILEP FILTRATION REPARTATION

About us

Vilep è un fornitore professionale per tutti i tipi di materiali di consumo per gascromatografia (vials, chiusure, flaconi) e per microfiltrazione da laboratorio utilizzati per analisi chimiche , microbiologiche o applicazioni più specifiche. I nostri prodotti includono una serie di filtri siringa per laboratorio, dischi membrana filtranti , filtri in fibra di vetro ecc. Da oltre 10 anni di produzione l'azienda fornisce prodotti qualificati a prezzi ragionevoli con un'attenzione particolare alla soddisfazione del cliente.

Vilep is a professional supplier for all types of gas chromatographic (vials, closure, storage vials) and laboratory microfiltration materials used for chemical, microbiological or more specific applications. Our products include a range of laboratory syringe filters, filter membranes, fiberglass filters, and so on. For over 10 years of production, the company supplies qualified products at reasonable prices with particular attention to customer satisfaction.



Better Membrane, Better Filtration

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VLPure Syringe Filter

VLPure 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.

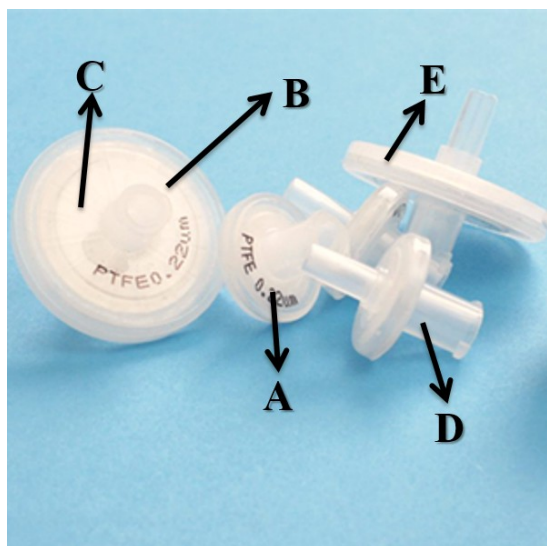
VLPure offers a wide variety of membranes ideal for any application. The housing attaches to any standard Luer lock syringe, so the sample can easily be pushed through the membrane with minimal pressure. The result is a particulate-free eluent that is ready for use with HPLC, GC, or other analytical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

Feature

- Less system downtime
- More consistent, reproducible results
- Increased column lifetime

Application

- ✓ HPLC, UHPLC, IC, GC, Dissolution testing, general particulate removal



A. Identification

Membrane type and pore size are clearly marked on individual syringe filter

B. Luer Lock Inlet Tip

Secures connections to prevent "blow off"

C. Sample Distribution Rings

Creates even sample distribution for high sample flow rates

D. Medical Grade Polymer Housing

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

E. Ultrasonically Welded

Ensures robust housing - filter integrity

Data Sheet

Parameters	ChemPure		
Medical Grade Housing material	PP		
diameter(mm)	4	13	25
Pore size(μm)	0.22, 0.45 & more		
Large effective Filtration area(cm ²)	0.15	1.09	4.08
Holdup volume(μl)	<5	<25	<100
Sample volume(ml)	<1	<10	<100
Inlet connection	Female Luer lock		
Outlet connection	Male Luer slip		
Flow direction	Enter from INLET		
Maximum Operating Pressure(psi)	87		
Pre-filtration(μm)	GF*		
Color code	No		

Order information

Membrane	Pore size (μm)	Quantity (pcs)/pack	Diameter 4 mm	Diameter 13 mm	Diameter 25 mm
Nylon	0.22	100	VLPSFNY0422NE	VLPSFNY1322NE	VLPSFNY2522NE
Nylon	0.45	100	VLPSFNY0445NE	VLPSFNY1345NE	VLPSFNY2245NE
PTFE/B	0.22	100	VLPSFPTFE0422NE-B	VLPSFPTFE1322NE-B	VLPSFPTFE2522NE-B
PTFE/B	0.45	100	VLPSFPTFE0445NE-B	VLPSFPTFE1345NE-B	VLPSFPTFE2245NE-B
PTFE/L	0.22	100	VLPSFPTFE0422NE-L	VLPSFPTFE1322NE-L	VLPSFPTFE2522NE-L
PTFE/L	0.45	100	VLPSFPTFE0445NE-L	VLPSFPTFE1345NE-L	VLPSFPTFE2245NE-L
PES	0.22	100	VLPSFPES0422NE	VLPSFPES1322NE	VLPSFPES2522NE
PES	0.45	100	VLPSFPES0445NE	VLPSFPES1345NE	VLPSFPES2245NE
PVDF/B	0.22	100	VLPSFPVDF0422NE-B	VLPSFPVDF1322NE-B	VLPSFPVDF2522NE-B
PVDF/B	0.45	100	VLPSFPVDF0445NE-B	VLPSFPVDF1345NE-B	VLPSFPVDF2245NE-B
PVDF/L	0.22	100	VLPSFPVDF0422NE-L	VLPSFPVDF1322NE-L	VLPSFPVDF2522NE-L
PVDF/L	0.45	100	VPSFPVDF0445NE-L	VLPSFPVDF1345NE-L	VLPSFPVDF2245NE-L
MCE	0.22	100	VLPSFMCE0422NE	VLPSFMCE1322NE	VLPSFMCE2522NE
MCE	0.45	100	VLPSFMCE0445NE	VLPSFMCE1345NE	VLPSFMCE2245NE
CA	0.22	100	VLPSFCA0422NE	VLPSFCA1322NE	VLPSFCA2522NE
CA	0.45	100	VLPSFCA0445NE	VLPSFCA1345NE	VLPSFCA2245NE

What's more?

1. Sterile syringe filters are available for ChemPure series
2. More pore sizes are available upon requests
3. .../B (B for hydrophobic), .../L (L for hydrophilic)



VIALS/CLOSURES/PACKAGING

VLPlus Syringe Filter

VLPlus Syringe Filters are widely adopted in the clarification of aqueous solutions, including column eluates, tissue culture additives and HPLC samples. Extremely low extractables of pure medical grade PP housing and high quality membrane component ensure better and consistent testing results. The unique design of gear edge for easy handling smooth filtration process significantly.

Housing Material

- Medical grade virgin PP raw material eliminate extractables to ensure accurate testing results.

Housing Design

- Unique design of gear rim makes filtration process easy handling.
- Marked with identifying code to denote pore size, membrane material
- Over modeled edge stands higher operating pressure.

Diameter

- Available in 13mm, 25mm.



Membrane Options

Nylon- broad chemical compatibility with cost-effectiveness

PES- fast flow rate as well as high throughput for general use

PVDF- wide chemical compatibility with good mechanical properties.

CA- low protein binding ideally for protein and enzyme filtrations

PTFE- extremely wide chemical compatibility with low level of extractables.

- Multiple pure membrane medium maximizes chemical compatibility for wide applications.



Feature

- Low extractables
- Easy twist off with gear rim ring
- Color coding directly tells membrane type
- Wide application compatibility and best for chromatography application

Application

- ✓ HPLC, UHPLC, IC, GC, Dissolution testing
- ✓ General particulate removal
- ✓ Routine QC analysis
- ✓ Environmental samples
- ✓ Biofuel analysis
- ✓ Food analysis

Data Sheet

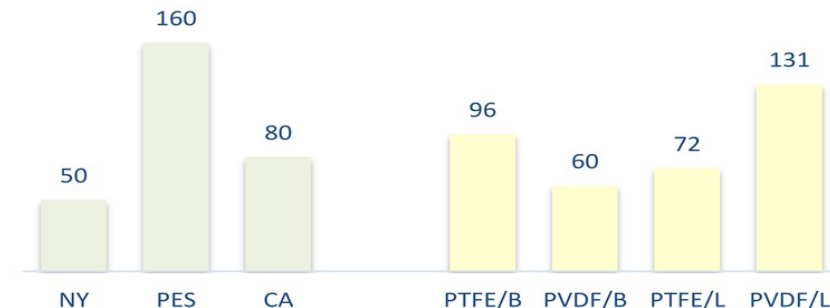
Parameters	VLPlus	
Medical Grade Housing material	PP	
diameter(mm)	13	25
Pore size(μm)	0.22, 0.45 & more	
Large effective Filtration area(cm ²)	0.92	2.98
Holdup volume(μl)	<25	<100
Sample volume(ml)	<10	<100
Inlet connection	Female Luer lock	
Outlet connection	Male Luer slip	
Flow direction	Enter from INLET	
Maximum Operating Temperature(°C)	50	
Maximum Operating Pressure(psi)	87	
Pre-filtration(μm)	No	
Color code	Yes	



average flow rate ml/min @0.7bar

tested by water

tested by ethanol



VIALS/CLOSURES/PACKAGING

Order information

Membrane	Pore size (µm)	Quantity (pcs)/pack	Diameter 13 mm	Diameter 25 mm
Nylon	0.22	100	VLPSFNY1322NS	VLPSFNY2522NS
Nylon	0.45	100	VLPSFNY1345NS	VLPSFNY2245NS
PTFE/B	0.22	100	VLPSFPTFE1322NS-B	VLPSFPTFE2522NS-B
PTFE/B	0.45	100	VLPSFPTFE1345NS-B	VLPSFPTFE2245NS-B
PTFE/L	0.22	100	VLPSFPTFE1322NS-L	VLPSFPTFE2522NS-L
PTFE/L	0.45	100	VLPSFPTFE1345NS-L	VLPSFPTFE2245NS-L
PES	0.22	100	VLPSFPES1322NS	VLPSFPES2522NS
PES	0.45	100	VLPSFPES1345NS	VLPSFPES2245NS
PVDF/B	0.22	100	VLPSFPVDF1322NS-B	VLPSFPVDF2522NS-B
PVDF/B	0.45	100	VLPSFPVDF1345NS-B	VLPSFPVDF2245NS-B
PVDF/L	0.22	100	VLPSFPVDF1322NS-L	VLPSFPVDF2522NS-L
PVDF/L	0.45	100	VLPSFPVDF1345NS-L	VLPSFPVDF2245NS-L
MCE	0.22	100	VLPSFMCE1322NS	VLPSFMCE2522NS
MCE	0.45	100	VLPSFMCE1345NS	VLPSFMCE2245NS
CA	0.22	100	VLPSFCA1322NS	VLPSFCA2522NS
CA	0.45	100	VLPSFCA1345NS	VLPSFCA2245NS



VLPMax Syringe Filter

VLPMax syringe filters are color-coded syringe filters and designed to speed up and increase sample volume throughput while reducing thumb pressure.

The VLPMax series are especially named for 30mm syringe filters, which are available with all kinds of membrane material, such as Nylon, CA, PES, MCE, PVDF, PTFE and so on. The regular pore sizes are 0.22 and 0.45 micron, while other pore sizes are available upon request.

Feature

Color coding: easier to tell the membrane material

Larger filtration areas: increase the sample throughput

The Design of sample distribution rings: increase the membrane flow rate

Better membrane media: improve membrane flow rate and filtration efficiency

Broad Application: a wide range of filtration media meets diverse application needs

Minimum sample hold-up: the filter housing is specifically designed to maximize the sample recovery

Sterile Verison: Filters can be purchased pre-sterilized by Gamma radiation and individually packaged



Application

- ✓ HPLC, UHPLC, IC, GC,
- ✓ Removal of protein precipitates
- ✓ Dissolution testing
- ✓ Cell culture
- ✓ Other filtration



Data Sheet

Parameters	VLPMax
Medical Grade Housing material	PP
diameter(mm)	30
Pore size(μm)	0.22, 0.45 & more
Large effective Filtration area(cm ²)	5.39
Holdup volume(μl)	<100
Sample volume(ml)	<200
Inlet connection	Female Luer lock
Outlet connection	Male Luer slip
Flow direction	Enter from INLET
Maximum Operating Temperature(°C)	50
Maximum Operating Pressure(psi)	87
Pre-filtration(μm)	GF*
Color code	Yes

Order information

Membrane	Pore size (μm)	Quantity (pcs)/pack	Diameter 30 mm
Nylon	0.22	100	VLPSFNY3022NX
Nylon	0.45	100	VLPSFNY3045NX
PTFE/B	0.22	100	VLPSFPTFE3022NX-B
PTFE/B	0.45	100	VLPSFPTFE3045NX-B
PTFE/L	0.22	100	VLPSFPTFE3022NX-L
PTFE/L	0.45	100	VLPSFPTFE3045NX-L
PES	0.22	100	VLPSFPES3022NX
PES	0.45	100	VLPSFPES3045NX
PVDF/B	0.22	100	VLPSFPVDF3022NX-B
PVDF/B	0.45	100	VLPSFPVDF3045NX-B
PVDF/L	0.22	100	VLPSFPVDF3022NX-L
PVDF/L	0.45	100	VLPSFPVDF3045NX-L
MCE	0.22	100	VLPSFMCE3022NX
MCE	0.45	100	VLPSFMCE3045NX
CA	0.22	100	VLPSFCA3022NX
CA	0.45	100	VLPSFCA3045NX

How to select your sample preparation device?



Step 1: Choose the suitable membrane filtration medium characteristics of samples

Solutions	Recommended
Solvent Mixtures	Nylon, MCE
Tissue culture Media, Buffers, Protein Analysis/ Biological Samples	CA, PES
High Particulate Loads	With GF or PP pre-filter
Aggressive or Pure Organic Solvents	PTFE, PVDF

Step 2: Choose the suitable diameter

Volume of samples		
< 1 ml	< 10 ml	< 100 ml
4mm	13mm	25mm/30mm

Step 3: Choose the suitable pore size based on the nature of your sample

Removal of high particulate matter with a glass fiber prefilter is critical before any drug, tox, or dirty environmental sample is filtered to ensure the highest syringe filter membrane performance.

Generally, 0.45 μm porosity filters are used to remove particulates from samples and mobile phase solutions. For sterile-filtration, a 0.20 μm porosity filter can be used.

Vilplus Membrane Filter

Membrane filters or "membranes" are polymer films with specific pore ratings. Membranes retain particles and microorganisms that exceed their pore ratings by acting as a physical barrier and capturing such particles on the surface of the membrane.

Nylon Membrane Filter

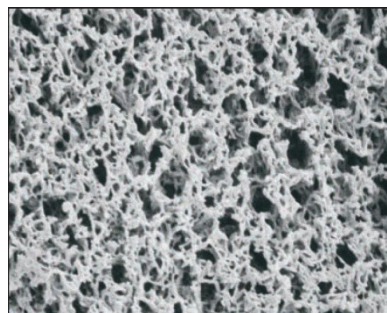
Nylon membrane filter is a supported, naturally hydrophilic membrane designed to wet out evenly and retain its superior strength during use in general microfiltration or medical assays.

Nylon membrane filter is flexible, durable and tear resistant and can be autoclaved at 135 °C.

Good chemical compatibility with aqueous and alcoholic solutions and solvents.

Features

- ◆ High strength and heat resistance
- ◆ Inherently hydrophilic membranes made by impregnating a polyester web with nylon
- ◆ Compatible with many aqueous and alcoholic solvents and solutions
- ◆ Use for HPLC sample preparation, to sterilize biological solutions or buffers, or for vacuum degassing



Order information

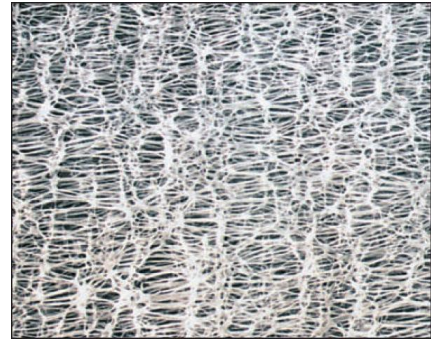
Diameter	Pore size (µm)	Quantity (pcs)/pack	Part Number
Nylon 13mm	0.22	400	VLPMFNY1322
Nylon 13mm	0.45	400	VLPMFNY1345
Nylon 25mm	0.22	200	VLPMFNY2522
Nylon 25mm	0.45	200	VLPMFNY2545
Nylon 47mm	0.22	200	VLPMFNY4722
Nylon 47mm	0.45	200	VLPMFNY4745
Nylon 90mm	0.22	100	VLPMFNY9022
Nylon 90mm	0.45	100	VLPMFNY9045
Other pore sizes or diameters are available upon request			

PTFE Membrane Filter

PTFE membrane is a naturally hydrophobic filter made of polytetra-fluorethylene laminated with PP layer. Excellent chemical resistance (PH 1-14), they are used also for solvents and acids. Due to its hydrophobic characteristics, it must be pre-wetted with ethanol or methanol before the filtration of aqueous solutions. However, Chemplus does offer the hydrophilic PTFE membrane for easy filtration.

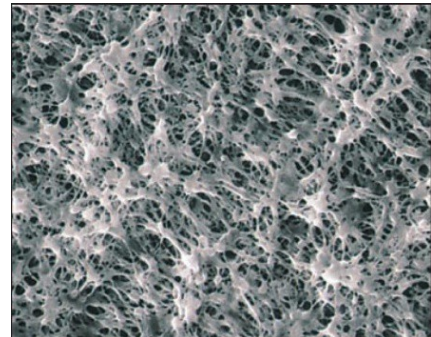
Hydrophobic PTFE Membrane Filters

- ♦ Thin, highly porous membrane filter
- ♦ Behaves as an absolute retentive membrane
- ♦ Underside laminated with polypropylene to improve handling
- ♦ Inert to most aggressive solvents, including strong acids and bases
- ♦ Use to sterilize gasses, vent gas from aqueous solutions, or sterilize or clarify aggressive chemicals



Hydrophilic PTFE Membrane Filter

- ♦ Maximal chemical and pH resistance
- ♦ High flow rates with minimal aqueous extractable (<0.3wt%)
- ♦ Optically clear when wet with water
- ♦ Ideal for HPLC and other mixtures of aqueous and organic solvents



Order information

Diameter	Pore size (μm)	Quantity (pcs)/pack	Part Number
PTFE/B 25mm	0.22	200	VLPMFPTFE2522-B
PTFE/B 25mm	0.45	200	VLPMFPTFE2545-B
PTFE/L 25mm	0.22	200	VLPMFPTFE2522-L
PTFE/L 25mm	0.45	200	VLPMFPTFE2545-L
PTFE/B 47mm	0.22	200	VLPMFPTFE4722-B
PTFE/B 47mm	0.45	200	VLPMFPTFE4745-B
PTFE/L 47mm	0.22	200	VLPMFPTFE4722-L
PTFE/L 47mm	0.45	200	VLPMFPTFE4745-L
Other pore sizes or diameters are available upon request			

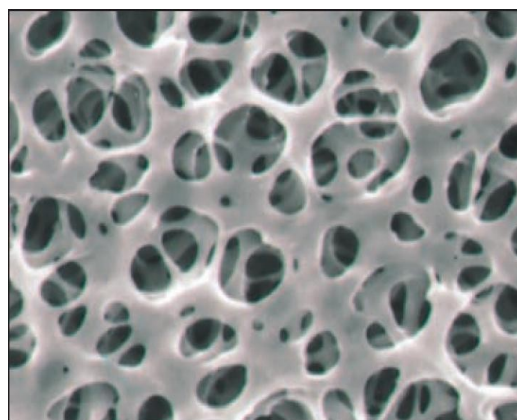
Cellulose Acetate Membrane Filter

The CA membrane filters are composed of pure cellulose acetate modified to offer researchers the lowest binding filters available. Due to the extremely low binding characteristics, these hydrophilic membranes provide high throughputs and reduce filter changes when filtering proteinaceous solutions.

The CA membranes present a strength and dimension stability (130 psi), their uniform pore size structure allows consistently high flow rates.

Features

- Composed of cellulose di- and triacetate, these filters exhibit low static charge and high strength
- May be sterilized repeatedly without loss of integrity or change in bubble point
- Good resistance to heat and low molecular weight alcohols (compared to MCE membranes)
- Use for filtration of enzyme solutions, diagnostic cytology, or receptor binding studies



Order information

Diameter	Pore size (µm)	Quantity (pcs)/pack	Part Number
CA 13mm	0.22	400	VLPMFCA1322
CA 13mm	0.45	400	VLPMFCA1345
CA 25mm	0.22	200	VLPMFCA2522
CA 25mm	0.45	200	VLPMFCA2545
CA 47mm	0.22	200	VLPMFCA4722
CA 47mm	0.45	200	VLPMFCA4745
CA 90mm	0.22	100	VLPMFCA9022
CA 90mm	0.45	100	VLPMFCA9045
Other pore sizes or diameters are available upon request			

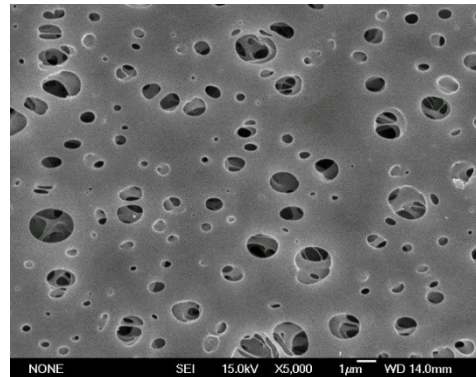
Polyethersulfone (PES) Membrane Filters

The highly asymmetrical pore structure of Chemplus PES flat membrane offers an excellent loading capacity and high flow rate. This membrane is hydrophilic and made with polyethersulfone polymer.

It is designed to remove particulates during general filtration and its low protein and drug binding characteristics make it ideally suited for use in life science applications.

Features

- ◆ Eliminates the need for wetting agents that can potentially interfere with analyses
- ◆ Ensures test results will not be compromised by wetting agents or other extractables
- ◆ Maximizes recovery of critical drugs or proteins
- ◆ Protects the integrity of the membrane under high pressure



Order information

Diameter	Pore size (µm)	Quantity (pcs)/pack	Part Number
PES 13mm	0.22	400	VLPMFPES1322
PES13mm	0.45	400	VLPMFPES1345
PES 25mm	0.22	200	VLPMFPES2522
PES 25mm	0.45	200	VLPMFPES2545
PES 47mm	0.22	200	VLPMFPES4722
PES 47mm	0.45	200	VLPMFPES4745
PES 90mm	0.22	100	VLPMFPES9022
PES 90mm	0.45	100	VLPMFPES9045
Other pore sizes or diameters are available upon request			

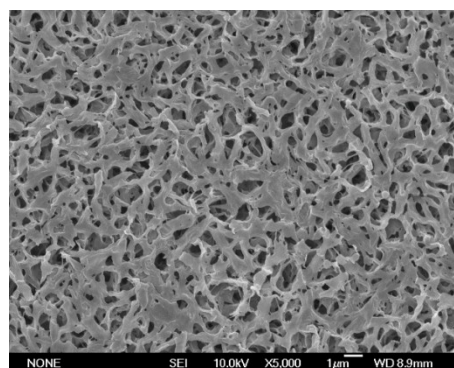
Hydrophobic PVDF Membrane Filters

PVDF membrane filters are particularly micro-porous membrane, and can be prepared to exhibit high efficiency for particle removal. PVDF membrane is naturally hydrophobic and micro-porous, which will not be wet by aqueous fluids.

Hydrophobic PVDF membrane can ensure wet air and other gas pass through smoothly, even when the differential pressure is very low. It holds the opposite capability against PVDF hydrophilic membrane.

Features

- ◆ Wide chemical compatibility
- ◆ Excellent mechanical properties
- ◆ High temperature capabilities and excellent ageing resistance
- ◆ Easy processing by extrusion, injection, compression, blow molding, solution processe
- ◆ Physiologically harmless and approved for contact with food products



Order information

Diameter	Pore size (µm)	Quantity (pcs)/pack	Part Number
PVDF 13mm	0.22	400	VLPMFPVDF1322
PVDF 13mm	0.45	400	VLPMFPVDF1345
PVDF 25mm	0.22	200	VLPMFPVDF2522
PVDF 25mm	0.45	200	VLPMFPVDF2545
PVDF 47mm	0.22	200	VLPMFPVDF4722
PVDF 47mm	0.45	200	VLPMFPVDF4745
PVDF 90mm	0.22	100	VLPMFPVDF9022
PVDF 90mm	0.45	100	VLPMFPVDF9045
Other pore sizes or diameters are available upon request			

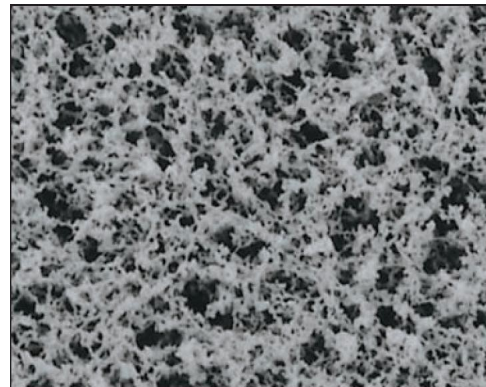
MCE Membrane Filter

We offer a complete range of mixed cellulose ester membranes, with a wide choice of pore sizes (from 0.2 to 3 μm) and diameters. The membranes are also available in sterile format and/or with a grid pattern that provides guidance for the quantification of microbial colonies without growth inhibition or enhancement.

Mixed cellulose ester membranes are composed of cellulose acetate and cellulose nitrate. The membrane offers a high degree of internal surface area for greater product adsorption. Mixed cellulose ester membranes are biologically inert and are a popular membrane filter choice in analytical and research applications.

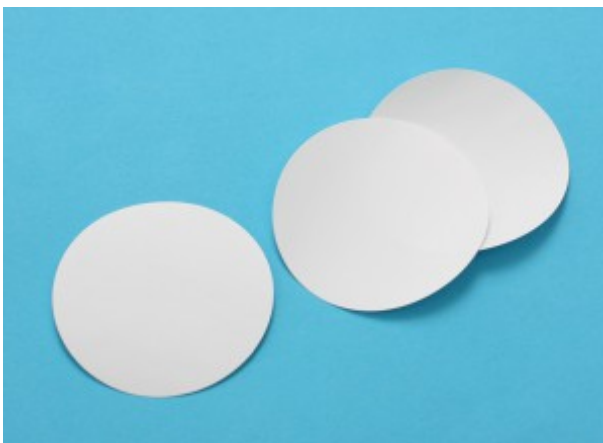
Features

- ◆ Composition: Mixed cellulose esters including cellulose nitrate and cellulose acetate, also known as nitrocellulose
- ◆ High porosity provides superior flow rates
- ◆ High protein binding can be blocked by pretreatment or utilized in applications
- ◆ High purity: Triton-free
- ◆ Autoclave: Withstands autoclaving temperatures up to 130°C without adversely affecting bubble point, flow rate or microbiological recovery
- ◆ Rapid wetting time: <3 seconds to wet a 47mm diameter disc with aqueous 1% methylene blue buffers, or for vacuum degassing



Applications

- ◆ Standard membranes for many laboratory applications including filter sterilizing biological fluids, microbiology, contamination analysis and air monitoring
- ◆ Gridded filters available for quantifying microbial growth
- ◆ Available non-sterile or sterilized



Specifications

Parameters	MCE
Filter Diameter (mm)	47 and 50 mm
Filter Surface	None or gridded
Filter Color	White, black or green
Sterility	None or sterile
Filter Pore Size (μm)	0.22, 0.45, 0.8 & more
Extractables:	< 2%

White membrane with black grid

Applications:

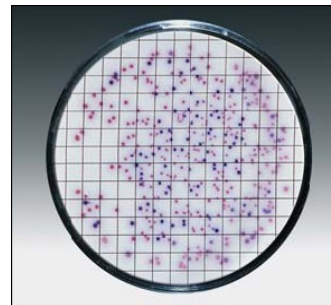
- Analysis of E. Coli bacteria

Examination of:

- Dark colonies

Pore Size: 0.22 μm , 0.45 μm , 0.8 μm

Diameter: 47mm, 50mm



Black membrane with white grids

Applications:

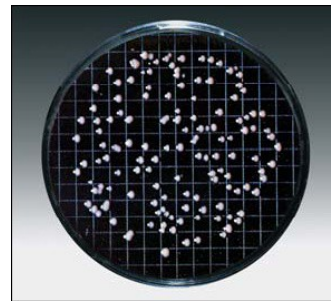
- Analysis of yeast and mold and Legionella sp.

Examination of:

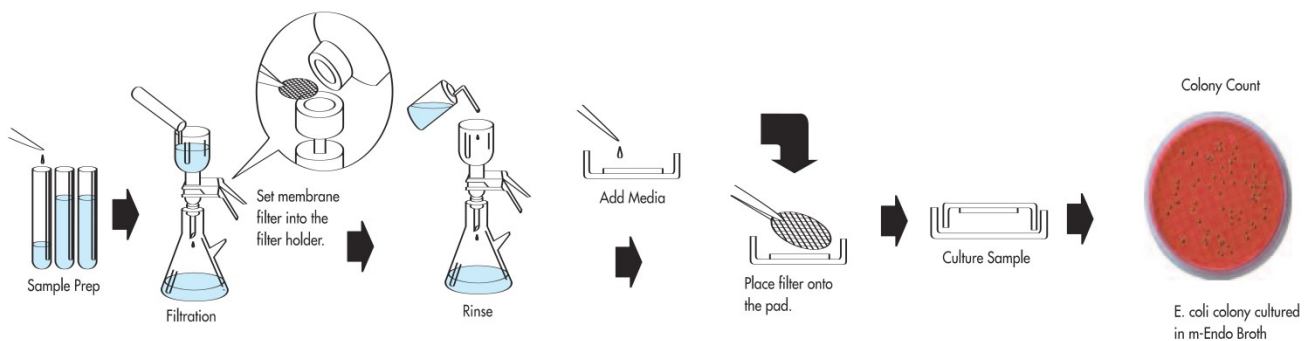
- White, being colonies

Pore Size: 0.45 μm , 0.8 μm

Diameter: 47mm, 50mm

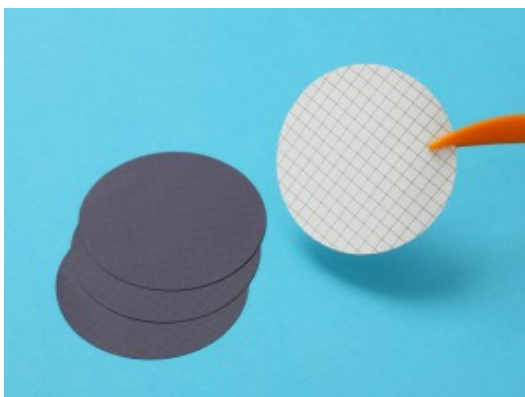


Sample Filtration and Growth Procedures



Order information

Diameter	Description	Pore size (µm)	Quantity (pcs)/pack	Part Number
MCE 13mm	White, Plain	0.22	400	VLPMFMCE1322
MCE 13mm	White, Plain	0.45	400	VLPMFMCE1345
MCE 13mm	White, Plain	0.80	400	VLPMFMCE1380
MCE 25mm	White, Plain	0.22	200	VLPMFMCE2522
MCE 25mm	White, Plain	0.45	200	VLPMFMCE2545
MCE 25mm	White, Plain	0.80	200	VLPMFMCE2580
MCE47mm	White, Plain	0.22	200	VLPMFMCE4722
MCE 47mm	White, Plain	0.45	200	VLPMFMCE4745
MCE 47mm	White, Plain	0.80	200	VLPMFMCE4780
MCE 50mm	White, Plain	0.22	200	VLPMFMCE5022
MCE 50mm	White, Plain	0.45	200	VLPMFMCE5045
MCE 50mm	White, Plain	0.80	200	VLPMFMCE5080
MCE 90mm	White, Plain	0.22	100	VLPMFMCE9022
MCE 90mm	White, Plain	0.45	100	VLPMFMCE9045
MCE 47mm	Black, Plain	0.22	200	VLPMFMCE4722B
MCE 47mm	Black, Plain	0.45	200	VLPMFMCE4745B
MCE 47mm	Black, Plain	0.80	200	VLPMFMCE4745B
MCE 47mm	Sterile, White, Black Grids	0.22	200	VLPMFMCE4722GWS
MCE 47mm	Sterile, White, Black Grids	0.45	200	VLPMFMCE4745GWS
MCE 47mm	Sterile, White, Black Grids	0.80	200	VLPMFMCE4780GWS
MCE 47mm	Sterile, Black, White Grids	0.22	200	VLPMFMCE4722GBS
MCE 47mm	Sterile, Black, White Grids	0.45	200	VLPMFMCE4745GBS
MCE47mm	Sterile, Black, White Grids	0.80	200	VLPMFMCE4780GBS
Other pore sizes or diameters are available upon request				



Nylon Membrane Data Sheet

Pore Size(μm)	Bubble Point(Bar)	Thickness(μm)	Water Flow Rate (mL/min/cm ²)
0.22	≥ 2.8	110 \pm 10	5-6
0.45	≥ 1.8	110 \pm 10	15-18
1.0	≥ 0.6	110 \pm 10	40-45
3.0	≥ 0.4	110 \pm 10	60-65
5.0	≥ 0.3	110 \pm 10	80-85

PTFE Membrane Data Sheet

Membrane Material	Pore Size(μm)	Average Bubble Point(Mpa)	Thickness(μm)	Flow Rate (mL/min/cm ²)
Hydrophobic PTFE	0.10	0.2-0.22 (Alcohol)	165 \pm 25	4-8
Hydrophobic PTFE	0.22	0.13-0.17 (Alcohol)	165 \pm 25	17-22
Hydrophobic PTFE	0.45	0.08-0.12 (Alcohol)	165 \pm 25	35-45
Hydrophobic PTFE	1.0	0.04-0.06 (Alcohol)	165 \pm 25	50-70
Hydrophobic PTFE	3.0	0.03-0.04 (Alcohol)	165 \pm 25	90-120
Hydrophobic PTFE	5.0	0.02-0.03 (Alcohol)	165 \pm 25	250-320
Hydrophilic PTFE	0.22	0.34-0.45 (Water)	165 \pm 25	10-18
Hydrophilic PTFE	0.45	0.2-0.3 (Water)	165 \pm 25	25-35

Cellulose Acetate Membrane Data Sheet

Pore Size(μm)	Bubble Point(Bar)	Thickness(μm)	Water Flow Rate (mL/min/cm ²)
0.22	≥ 4	120 \pm 10	19-25
0.45	≥ 3	120 \pm 10	40-45
0.80	≥ 1.5	130 \pm 10	150-170
3.0	≥ 0.5	130 \pm 10	450-500
5.0	≥ 0.3	130 \pm 10	800-900

Polyethersulfone (PES) Membrane Data Sheet

Pore Size(μm)	Bubble Point(Bar)	Thickness(μm)	Water Flow Rate(\leq seconds/100mL)
0.10	≥ 2.10	135 \pm 15	130
0.22	≥ 3.40	135 \pm 15	30
0.45	≥ 2.70	135 \pm 15	21
0.65	≥ 1.90	135 \pm 15	17
0.80	≥ 1.10	135 \pm 15	8
1.20	≥ 0.60	135 \pm 15	/
5.0	≥ 0.40	135 \pm 15	/

PVDF Membrane Data Sheet

Pore Size(μm)	Bubble Point(Bar)	Thickness(μm)	Water Flow Rate (mL/min/cm ²)
0.22	0.12-0.15(Alcohol)	130 \pm 10	10-12
0.45	0.06-0.10(Alcohol)	130 \pm 10	30-45

MCE Membrane Data Sheet

Pore Size(μm)	Bubble Point(Bar)	Thickness(μm)	Water Flow Rate (mL/min/cm ²)
0.20	\geq 3.62	125 \pm 15	17-19
0.45	\geq 2.23	125 \pm 15	55-60
0.65	\geq 1.18	125 \pm 15	120-135
0.80	\geq 0.95	125 \pm 15	160-180
1.20	\geq 0.77	125 \pm 15	230-270
3.0	\geq 0.69	125 \pm 15	290-320
5.0	\geq 0.56	125 \pm 15	500-560
8.0	\geq 0.40	125 \pm 15	550-600

Leading Supplier for Vials and Caps



VIALS/CLOSURES/PACKAGING

Vilep sample vials provide advantages over the standard straight glass sample vials. The flared end of the vial makes loading a liquid sample much easier since the flare helps guide the syringe needle into the vial. The flared end also makes the vial much stronger so that vials can easily be inserted and removed from the end of the probe using tweezers without breaking the glass.

2mL Autosampler Vial			
Design of the Neck	Volume	Material	Dimension
8-425	2mL	Borosilicate glass; Transparent polypropylene	32*11.6mm
9mm	2mL		
10-425	2mL		
11mm Crimp top	2mL		
Snap top	2mL		

Insert Vial			
Appropriate vial	Volume	Type of Glass	Dimension
For 8-425 screw top vial	100µL	Borosilicate glass	29*5mm
	200µL		31*5mm
	300µL		31*5mm
For 9mm, 10-425, 11mm Crimp top, Snap top vial	250µL		29*6mm
	300µL		31*6mm
	400µL		31*6mm

Cap & Septa for 2mL Autosampler Vial		
Design of the Neck	Material	Septa
8-425	Polypropylene	1. Pre-slit Blue PTFE/White Silicone Septa; 2. Red PTFE/White Silicone Septa; 3. White PTFE/Red Silicone Septa.
9mm		
10-425		
11mm Crimp top	Aluminium	1. Red PTFE/White Silicone Septa; 2. White PTFE/Red Silicone Septa.
Snap top	Polyethylene	



Order information

Item	Description	Qty.
8-425 Screw Top Vial		
VLP1232P8	2mL Clear vial, 11.6*32mm, 8-425 screw top	100
VLP1232P8GR	2mL Clear vial, 11.6*32mm, 8-425 screw top, graduated with writing area	100
VLP1232P8A	2mL Amber vial, 11.6*32mm, 8-425 screw top	100
VLP1232P8AGR	2mL Amber vial, 11.6*32mm, 8-425 screw top, graduated with writing area	100
8-425 Screw Cap & Septa		
VLPCL8ST	8-425 Black screw cap, with red PTFE/white silicone septa, center hole	100
VLPCL8STSL	8-425 Black screw cap, with pre-silt blue PTFE/white silicone septa, center hole	100
VLPCL8TPST	8-425 Black screw cap, with red PTFE/white silicone septa, Solid-top (Storage)	100
9mm Screw Top Vial		
VLP1232P9	2mL Clear vial, 11.6*32mm, 9mm screw top	100
VLP1232P9GR	2mL Clear vial, 11.6*32mm, 9mm screw top, graduated with writing area	100
VLP1232P9A	2mL Amber vial, 11.6*32mm, 9mm screw top	100
VLP1232P9AGR	2mL Amber vial, 11.6*32mm, 9mm screw top, graduated with writing area	100
VLP1232P9PP	2mL Transparent pp vial, 11.6*32mm, 9mm screw top	100
VLP1232P9P3UL	300µL Micro-Vial, Transparent pp, 11.6*32mm, 9mm screw top	100
9mm Screw Cap & Septa		
VLPCL9ST	9mm Blue screw cap, with red PTFE/white silicone septa, center hole	100
VLPCL9TPST	9mm Blue screw cap, with red PTFE/white silicone septa, Solid-top (Storage)	100
VLPCL9STSL	9mm Blue screw cap, with pre-silt blue PTFE/white silicone septa, center hole	100
VLPCL9STB	9mm Blue screw cap, with bonded red PTFE/white silicone septa, center hole	100
VLPCL9STSLB	9mm Blue screw cap, with bonded pre-silt blue PTFE/white silicone septa, center hole	100
10-425 Screw Top Vial		
VLP1232P10	2mL Clear vial, 11.6*32mm, 10-425 screw top	100
VLP1232P10GR	2mL Clear vial, 11.6*32mm, 10-425 screw top, graduated with writing area	100
VLP1232P10A	2mL Amber vial, 11.6*32mm, 10-425 screw top	100
VLP1232910AGR	2mL Amber vial, 11.6*32mm, 10-425 screw top, graduated with writing area	100
10-425 Screw Cap & Septa		
VLPCL10ST	10-425 Black screw cap, with red PTFE/white silicone septa, center hole	100
VLPCL10STSL	10-425 Black screw cap, with pre-silt blue PTFE/white silicone septa, center hole	100
11mm Crimp Top Vial		
VLP11CR	2mL Clear vial, 11.6*32mm, 11mm crimp top	100
VLP11CRGR	2mL Clear vial, 11.6*32mm, 11mm crimp top, graduated with writing area	100
VLP11CRA	2mL Amber vial, 11.6*32mm, 11mm crimp top	100
VLP11CRAGR	2mL Amber vial, 11.6*32mm, 11mm crimp top, graduated with writing area	100
11mm Crimp Top Cap & Septa		
VLPAL11ST	11mm Aluminium cap, with red PTFE/white silicone septa, center hole	100
VLPAL11TST	11mm Aluminium cap, with red PTFE/white silicone septa/red PTFE, center hole	100
VLPAL11STSL	11mm Aluminium cap, with pre-silt red PTFE/white silicone septa, center hole	100
11mm Snap Top Vial		
VLP11SP	2mL Clear vial, 11.6*32mm, 11mm snap top	100
VLP11SPGR	2mL Clear vial, 11.6*32mm, 11mm snap top, graduated with writing area	100
VLP11SPA	2mL Amber vial, 11.6*32mm, 11mm snap top	100
VLP11SPAGR	2mL Amber vial, 11.6*32mm, 11mm snap top, graduated with writing area	100
11mm Snap Top Cap & Septa		
VLPCLS11ST	11mm PP snap cap, with red PTFE/white silicone septa, center hole	100
VLPCLS11RT	11mm PP snap cap, with white PTFE/red rubber septa, center hole	100
VLPCLS11TST	11mm PP snap cap, with red PTFE/white silicone septa/red PTFE, center hole	100
VLPCLS11STSL	11mm PP snap cap, with pre-silt blue PTFE/white silicone septa, center hole	100