MICROLAB SCIENTIFIC

Lab Filtration

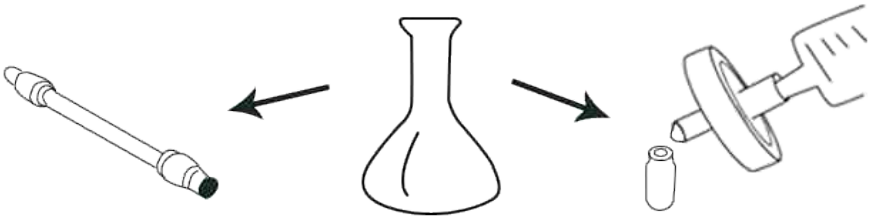
Syringe Filter Guide

Lab Filtration

Microlab Scientific Co. , Ltd provides more than seven series of syringe filters under the brand"**Microlab Scientific**", and products produced in our own plant named Wenzhou Maikai Laboratory Co. , ltd in China.The syringe filter ranges with various membrane materials,pore sizes,diameters and special designs to match all of your requirements.

Hot sales Series:
Easyfil™,Chromfil™,Biofil™,Microfil™,Bestfil™,GDXfil™, DLLfil™.
Membrane Material:
Nylon, PES, CA, MCE, PTFE, PVDF, PP,PC, PVDF/L,PTFE/L, GF, RC, Mesh.
Pore Size:
Ranges from 0.1μm~10μm.
Diameter:
4mm,13mm,17mm, 25mm, 30/33mm, 50mm and so on.

Why use syringe filters?



On a $400 UHPLC Column?

Where would you rather trap the particles in your buffer?

Or a $0.50 syringe filter?

How to select the syringe filter?

Step one: choose the suitable filter media

Solvents		Aqueous			
Non-Aqueous	Aqueous Mixtures	Hydrophilic			
Hydrophobic	Hydrophilic	Biological Samples	Sterilization Microbial Analysis	HPLC and GC Biological Sample	Solvent Mixtures Sample Prep
PTFE, PVDF	Nylon, PTFE/L, PVDF/L, RC	PES, CA, PVDF/L, GF	MCE/NC	PVDF/L, RC	Nylon, PTFE/L, PVDF/L, RC

Step two: choose the right diameter

Series	Diameter (mm)	Filtration Area(cm^2)	Holdup Volume(μl)	Sample Volume(ml)	Burst Pressure(psi)	Housing Material
Biofil	4	0.125	5	1	87	PP
Chromfil/Easyfil	13	0.92	10	10	87	PP
Biofil	13	1.09	20	10	87	PP
Microfil	17	1.65	20	20	87	PP
Chromfil/Easyfil	25	2.98	50	100	87	PP
Biofil	25	4.08	100	100	87	PP
DLLfil	28	5	200	150	87	PC
Bestfil	33	4.6	80	120	87	MBS
Microfil	33	4.9	100	120	87	PP

Biofil™ Syringe Filter

- Diameter:4mm,13mm,25mm.
- PP/GF prefilter structure: suitable for high particulate filtration.

Chromfil™ Syringe Filter

- Diameter: 13mm,25mm.
- Color coding with rim easy for identification and holding.
- One layer membrane structure, low extractable.

Microfil™ Syringe Filter

- Diameter: 17mm, 33mm.
- Color coding easy for identification.
- PP/GF prefilter structure: suitable for high particulate filtration.

GDXfil™ Syringe Filter

- Diameter: 25mm.
- Four layers membrane structure: best choice for high particulate filtration.

DLLfil™ Syringe Filter

- Diameter: 28mm.
- PC housing resistance for high aggressive and high temperature solutions.
- PP/GF prefilter structure: suitable for high particulate filtration.

Bestfil™ Syringe Filter

- Diameter: 33mm.
- Color coding easy for identification.
- Resistance high pressure.

Filter Series

Biofil™ Syringe Filter

Introduction

- Three diameters: 4mm, 13mm, 25mm.
- Ultrasonic welding: bigger effective filtration area than injection molding.
- Code marked: easy to identify the pore size and filter media.
- Prefilter design: ideal for high throughput filtration of particle-laden solutions.

Application

- Chromatography sample preparation.
- Particle-laden solutions filtration.
- General particulate removal.

Technical Specification

Filter Media	Nylon/CA/MCE/PES/GF/RC/PP/PTFE /Hydrophilic PTFE/ PVDF/Hydrophilic PVDF		
Housing	PP		
Diameter	4mm	13mm	25mm
Pore Size	0.1μm, 0.22μm, 0.45μm, 1.0μm, 3.0μm, 5.0μm		
Sealing Technology	Ultrasonic welding		
Filtration Area	0.125cm²	1.09cm²	4.08cm²
Inlet/Outlet Connections	Female inlet lock / Male outlet slip		
Max. Operation Pressure	6bar@23℃		

Order Information

	4mm		13mm		25mm	
	0.22μm	0.45μm	0.22μm	0.45μm	0.22μm	0.45μm
Nylon	S04NY022B	S04NY045B	S13NY022B	S13NY045B	S25NY022B	S25NY045B
CA	S04CA022B	S04CA045B	S13CA022B	S13CA045B	S25CA022B	S25CA045B
MCE	S04MCE022B	S04MCE045B	S13MCE022B	S13MCE045B	S25MCE022B	S25MCE045B
PES	S04PES022B	S04PES045B	S13PES022B	S13PES045B	S25PES022B	S25PES045B
PTFE	S04PTB022B	S04PTB045B	S13PTB022B	S13PTB045B	S25PTB022B	S25PTB045B
Hydrophilic PTFE	S04PTL022B	S04PTL045B	S13PTL022B	S13PTL045B	S25PTL022B	S25PTL045B
PVDF	S04PVB022B	S04PVB045B	S13PVB022B	S13PVB045B	S25PVB022B	S25PVB045B
Hydrophilic PVDF	S04PVL022B	S04PVL045B	S13PVL022B	S13PVL045B	S25PVL022B	S25PVL045B
RC	S04RC022B	S04RC045B	S13RC022B	S13RC045B	S25RC022B	S25RC045B
PP	S04PP022B	S04PP045B	S13PP022B	S13PP045B	S25PP022B	S25PP045B
	0.7μm	1.0μm	0.7μm	1.0μm	0.7μm	1.0μm
GF	S04GF070B	S04GF100B	S13GF070B	S13GF100B	S25GF070B	S25GF100B

Note: 1. Package:100pcs/pk;Non Sterile.
2.Other pore sizes are available.

Filter Series

Chromfil™ Syringe Filter

Introduction

- Diameter: 13mm, 25mm.
- Injection molding: high pressure resistant.
- Color coding with rim: more popular and easier to identify the pore size and filter media.

Application

- Chromatography sample preparation.
- General particulate removal.

Technical Specification

Filter Media	Nylon/CA/MCE/PES/GF/RC/PP/ PTFE/Hydrophilic PTFE/ PVDF/Hydrophilic PVDF	
Housing	PP	
Diameter	13mm	25mm
Pore Size	0.1μm, 0.22μm, 0.45μm, 1.0μm, 3.0μm,5.0μm	
Sealing Technology	Injection molding	
Filtration Area	1.09cm²	4.08cm²
Inlet/Outlet Connections	Female inlet lock / Male luer slip	
Max. Operation Pressure	6bar@23℃	

Order Information

	13mm		25mm	
	0.22μm	0.45μm	0.22μm	0.45μm
Nylon	S13NY022C	S13NY045C	S25NY022C	S25NY045C
CA	S13CA022C	S13CA045C	S25CA022C	S25CA045C
MCE	S13MCE022C	S13MCE045C	S25MCE022C	S25MCE045C
PES	S13PES022C	S13PES045C	S25PES022C	S25PES045C
PTFE	S13PTB022C	S13PTB045C	S25PTB022C	S25PTB045C
Hydrophilic PTFE	S13PTL022C	S13PTL045C	S25PTL022C	S25PTL045C
PVDF	S13PVB022C	S13PVB045C	S25PVB022C	S25PVB045C
Hydrophilic PVDF	S13PVL022C	S13PVL045C	S25PVL022C	S25PVL045C
RC	S13RC022C	S13RC045C	S25RC022C	S25RC045C
PP	S13PP022C	S13PP045C	S25PP022C	S25PP045C
	0.7μm	1.0μm	0.7μm	1.0μm
GF	S13GF070C	S13GF100C	S25GF070C	S25GF100C

Note: 1. Package:100pcs/pk;Non Sterile. 2.Other pore sizes are available.
Color:Nylon(Purple); CA/MCE(Blue); PES(Green); PTFE(Red);
PVDF/RC/(Purplish Red); GF/PP(Brown).

Filter Series

Lab Filtration

Microfil™ Syringe Filter

Introduction

- Diameter: 17mm, 30/33mm.
- Injection molding: High pressure resistant.
- Color coding: More popular and easier to identify the pore size and filter media.
- Larger filtration areas: (bigger than 33mm) increased sample throughout.

Application

- Chromatography sample preparation.
- Environmental samples.
- General particulate removal.
- Dissolution testing.
- Removal of protein precipitates.

Technical Specification

Filter Media	Nylon/CA/MCE/PES/GF/RC/PP/PTFE/ Hydrophilic PTFE/PVDF/Hydrophilic PVDF	
Housing	PP	
Diameter	17mm/33mm	
Pore Size	0.1μm, 0.22μm, 0.45μm, 1.0μm, 3.0μm,5.0μm	
Sealing Technology	Injection molding	
Filtration Area	1.65cm²	5.39cm²
Inlet/Outlet Connections	Female luer lock / Male luer slip	
Max. Operation Temperature	50℃	
Max. Operation Pressure	6bar@23℃	

Order Information

	17mm		33mm	
	0.22μm	0.45μm	0.22μm	0.45μm
Nylon	S17NY022M	S17NY045M	S33NY022M	S33NY045M
CA	S17CA022M	S17CA045M	S33CA022M	S33CA045M
MCE	S17MCE022M	S17MCE045M	S33MCE022M	S33MCE045M
PES	S17PES022M	S17PES045M	S33PES022M	S33PES045M
PTFE	S17PTB022M	S17PTB045M	S33PTB022M	S33PTB045M
Hydrophilic PTFE	S17PTL022M	S17PTL045M	S33PTL022M	S33PTL045M
PVDF	S17PVB022M	S17PVB045M	S33PVB022M	S33PVB045M
Hydrophilic PVDF	S17PVL022M	S17PVL045M	S33PVL022M	S33PVL045M
RC	S17RC022M	S17RC045M	S33RC022M	S33RC045M
PP	S17PP022M	S17PP045M	S33PP022M	S33PP045M
	0.7μm	1.0μm	0.7μm	1.0μm
GF	S17GF070M	S17GF100M	S33GF070M	S33GF100M

Note: 1. Package:100pcs/pk;Non Sterile. 2.Other pore sizes are available.
Color:Nylon(Yellow); CA/MCE(Blue); PES(Green); PTFE(Red);
PVDF/RC/(Purplish Red); GF/PP(Brown).

GDXfil™ Syringe Filter

Introduction

- Diameter: 25mm.
- Novel prefiltration stack of 100% borosilicate.
- Glass fibers: facilitates exceptional loading capacity with fast flow rates.
- Code marked: easy to identify the pore size and filter media.
- Big volume design: processes three to seven times more sample volume.

Application

- Dissolution testing.
- Concentration analysis.
- Environmental samples.
- Chromatography sample preparation.
- General particulate removal.

Technical Specification

Filter Media	Nylon/CA/MCE/PES/RC/PTFE/PVDF/ Hydrophilic PTFE/Hydrophilic PVDF
Housing	PP
Diameter	25mm
Pore Size	0.22μm, 0.45μm
Sealing Technology	Ultrasonic Welding
Filtration Area	4.6cm²
Inlet/Outlet Connections	Female luer lock / Male luer slip
Max. Operation Pressure	5.2bar@23℃

Order Information

Pore Size	Nylon	CA	PTFE	Hydrophilic PTFE	PVDF
0.22	S25NY022G	S25CA022G	S25PTB022G	S25PTL022G	S25PVB022G
0.45	S25NY045G	S25CA045G	S25PTB045G	S25PTL045G	S25PVB045G
Hydrophilic PVDF	**PES**	**RC**	**GF**	**PP**	**MCE**
S25PVL022G	S25PES022G	S25RC022G	S25GF022G	S25PP022G	S25MCE022G
S25PVL045G	S25PES045G	S25RC045G	S25GF045G	S25PP045G	S25MCE045G

Note:Other Pore size and Filter Media is available.

Filter Series

DLLfil™ Syringe Filter

Introduction

- Diameter: 28mm even bigger than millipore's 33mm syringe filter.
- PC housing: high temperature resistance and broad chemical resistance.
- Double luer lock.
- Prefilter options: PP, GF.
- Sterilization available.

Application

- HPLC sample preparation.
- Environmental samples.
- General particulate removal.
- Removal of protein precipitates.
- High temperature liquid filtration.

Technical Specification

Filter Media:	CA/PES/PTFE/PVDF/ Hydrophilic PTFE/Hydrophilic PVDF
Housing	PC
Diameter	28mm
Pore Size	0.22μm, 0.45μm
Sealing Technology	Ultrasonic Welding
Filtration Area	5cm²
Inlet/Outlet Connections	Female Luer Lock Inlet /Male Luer Lock Outlet
Max. Operation Pressure	6bar@23℃

Order Information

Pore Size	Nylon	CA	PTFE	Hydrophilic PTFE	PVDF
0.22	S28NY022D	S28CA022D	S28PTB022D	S28PTL022D	S28PVB022D
0.45	S28NY045D	S28CA045D	S28PTB045D	S28PTL045D	S28PVB045D
Hydrophilic PVDF	**PES**	**RC**	**GF**	**PP**	**MCE**
S28PVL022D	S28PES022D	S28RC022D	S28GF022D	S28PP022D	S28MCE022D
S28PVL045D	S28PES045D	S28RC045D	S28GF045D	S28PP045D	S28MCE045D

Note:Other pore size and filter media is available.

Filter Series

Bestfil™ Syringe Filter

Introduction

- ***Faster flow rate .***
  The larger filter surface area increases flow rate and throughput. It also makes it easier to filter solutions because it reduces the pressure required to empty the syringe.
- ***Higher operating pressure.***
  Bestfil™ have a maximum housing pressure of 10bar (145 psi), which means you can filter solutions faster than before.
- ***Color-coded.***
  The color-coded band on the Bestfil™ housing clearly indicates which membrane is inside.

Application

- HPLC sample preparation.
- Biological solutions filtration.
- General particulate removal.
- Removal of protein precipitates.

Technical Specification

Filter Media	Nylon/CA/GF/PES/PTFE/RC/MCE Hydrophilic PTFE/Hydrophilic PVDF		
Pore Size	0.1μm, 0.22μm, 0.45μm, 1.0μm, 3.0μm,5.0μm		
Connections	Inlet:Female Luer Lock Outlet:Male Luer Ship		
Housing	MBS	Diameter	33mm
Sealing Technology	Injection molding	Filtration Area	5.39cm²
Holdup Volume(μl)	<200	Sample Volume(ml)	<200
Maximum Operating Temperature(°C)	50	Max. Operation Pressure	87psi (6.0 bar) at 20

Order Information

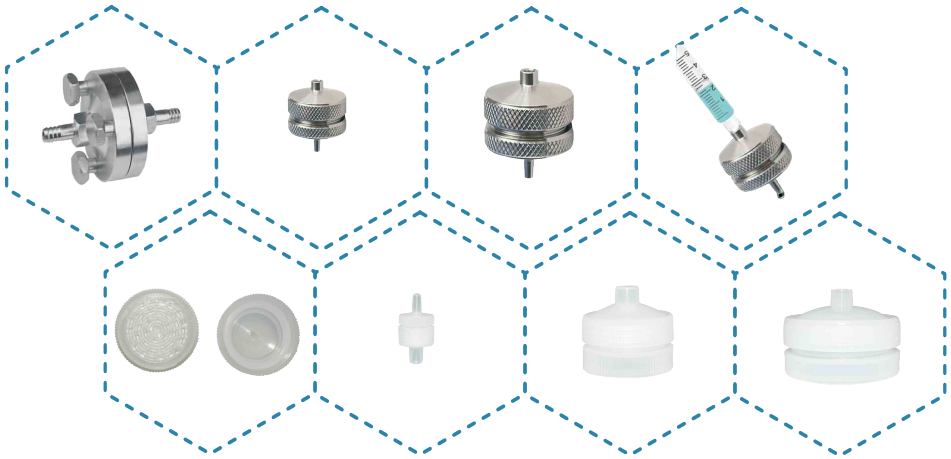
Pore Size	Nylon	CA	PTFE	Hydrophilic PTFE	PVDF
0.22	S33NY022B	S33CA022B	S33PTB022B	S33PTL022B	S33PVB022B
0.45	S33NY045B	S33CA045B	S33PTB045B	S33PTL045B	S33PVB045B
Hydrophilic PVDF	**PES**	**RC**	**GF**	**PP**	**MCE**
S33PVL022B	S33PES022B	S33RC022B	S33GF022B	S33PP022B	S33MCE022B
S33PVL022B	S33PES045B	S33RC045B	S33GF045B	S33PP045B	S33MCE045B

Note: 1. Diameter:33mm;package:100pcs/pk.
2.Other pore size and Filter Media is available.

Reusable Syringe Filter Holder

Introduction

- Plastic syringe filter holder made of pure polypropylene.
- Stainless steel syringe filter holder made of 316L stainless steel.



Order Information

P/N	Description	Packing
SFH013P	Reusable Syringe Filter Holder, PP Dia. 13mm	10
SFH025P	Reusable Syringe Filter Holder, PP Dia. 25mm	10
SFH050P	Reusable Syringe Filter Holder, PP Dia. 50mm	10
SFH013S	Reusable Syringe Filter Holder, 316L Stainless Steel Dia. 13mm	1
SFH025S	Reusable Syringe Filter Holder, 316L Stainless Steel Dia. 25mm	1
SFH047S	Reusable Syringe Filter Holder, 316L Stainless Steel Dia. 47mm	1

Vent Filter

Introduction

50mm vent filters are sterilizing filter for venting and liquid solutions.

Application

- Sterile venting of carboys, filling vessels, fermentation tanks,bioreactors.
- Protect pump components from liquid damage by using between a pump and receiving vessel.
- Chromatography solutions.

Technical Specification

Filter Media	PTFE/ PES/Nylon66 /PP/GF/PVDF
Housing	PP
Diameter	50mm
Pore Size,μm	0.22μm, 0.45μm
Sealing Technology	Thermal Bonding, No Adhesives
Filtration Area	≥ 0.021ft²
Inlet/Outlet Connections	7~13 mm stepped hose barb connection with 6:100 Luer slip
Max.Operation Pressure	Forward: 3.5 bar @ 23℃ and 3.0 bar @ 60℃ for liquid; 3.0 bar @ 23℃ and 2.5 bar @ 60℃ for air & gas.
Sterilization	By EO or 3 autoclave cycles of 30 min at 123℃

Order Information

Pore Size	Nylon	CA	PTFE	Hydrophilic PTFE	PVDF	Hydrophilic PVDF	PES
0.22	S50NY022	S50CA022	S50PTB022	S50PTL022	S50PVB022	S50PVL022	S50PES022
0.45	S50NY045	S50CA045	S50PTB045	S50PTL045	S50PVB045	S50PVL045	S50PES045

Note: 1. Diameter:50mm;package:25pcs/pk.
2.Other pore size and Filter Media is available.

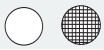
Membrane Filters Guide

Microlab Scientific supplies the Membrane Filters with an accurate controlled pore size distribution and higher strength and flexibility,which ensure reproducibility and consistency.The Filter media including Nylon, PES,PVDF,PTFE,MCE,CA,PP and so on.

Microlab Scientific offers membrane in rolls and discs.The Width ranges from 260-300mm and the Diameter ranges from 13mm to 293mm.

- Microlab Scientific Membrane Filters.
- Professional for Analytical Filtrations.
- Easy Choice leads to Perfect Solutions.

Membrane Specifications Chart

Membrane	Pore Size Range (μm)	Diameter Range (mm)	Surface Colors	Surface Type (plain/gridded)	Sterile Or Not
MCE (Mixed cellulose)	0.1 - 5.0	13-293	White/Black		Nonsterile or Sterile
CA(Cellulose Acetate)	0.2 - 5.0	13-293	White		Nonsterile
PES(Polyethersulfone)	0.1-1.0	13-142	White		Nonsterile or Sterile
Hydrophilic PTFE	0.1-5.0	13-142	White		Nonsterile
Hydrophobic PTFE	0.1-5.0	13-142	White		Nonsterile
PP(polypropylene)	0.1-50	13-293	White		Nonsterile
Nylon(polyamide)	0.1-5.0	13-293	White		Nonsterile
PVDF(Polyvinylidene Fluoride)	0.2-5.0	13-142	White		Nonsterile

Membrane Filter application chart

Membrane Type	Recommended Application
Nylon	Hydrophilic and commonly used for aqueous or mixed organic sample prep and HPLC, GC or dissolution sample analysis, such as bases, most HPLC solvents, alcohols, aromatic hydrocarbons, and THF. Not for strong acids, strong bases and high protein recovery. Excellent flow rates with most sample matrices and extremely low in extractables.
PTFE	Hydrophobic and perfect for organic solvent-based, acidic or basic samples and all solvents, such as aggressive solvents, strong acids and bases, alcohols, and aromatics. Chemically resistant to all solvents and has an excellent thermal stability to high temperature fluids. It can be used with aqueous samples after pre-wetting with small amount of alcohol and then flushing with water.
PVDF	Hydrophilic and excellent for HPLC and GC sample prep/clean up and protein-based samples due to broad chemical compatibility, the nature of a low protein binder, and low UV adsorbing extractables. It can be used for alcohols, weak acids, proteins, peptides and other biomolecules for high protein recovery .
PES	Hydrophilic and excellent for tissue culture, media, and buffers due to very low protein and nucleic acid binding and excellent flow rates. The PES membrane shows better chemical resistance than cellulose acetate. It is widely used in clinical/toxicology, ion chromatography, ICP-MS, AAS, and capillary electrophoresis for strong bases, alcohols, proteins, peptides.
MCE	Hydrophilic and ideal for aqueous samples filtration that need higher flow rates and larger volume, including clarification or sterilization of aqueous solutions, particulate analysis and removal, air monitoring, microbial analysis, cytology, HPLC samples prep/clean up, virus concentration, biological assays, food microbiology (enumeration of E. coli in foods), bacteriological studies.

Membrane Filter

Nylon

Introduction

Hydrophilic and commonly used for aqueous or mixed organic sample prep and HPLC,GC or dissolution sample analysis,such as bases,most HPLC solvents,alcohols,aromatic hydrocarbons, and THF.Not for strong acids, strong bases and high protein recovery.Excellent flow rates with most sample matrices and extremely low in extractables.

Product Specifications

Material	Nylon （Polyamides） Membrane Filter								
Wettability	Hydrophilic		PH		6~13		Thickness		100±15
Diameter	13mm, 25mm, 47mm, 90mm, 142mm, 293mm								
Pore Size(μm)	0.1	0.22	0.45	0.65	0.8	1.0	3.0	5.0	10
Minimum Bubble Point (Mpa)	0.36	0.28	0.18	0.12	0.09	0.07	0.045	0.025	0.01
Typical Flow Rate (mL/min/cm²)	⩾3..5	⩾7.5	⩾14	⩾36	⩾49	⩾61	⩾108	⩾162	⩾278

Note: Typical flow rate test under the pressure 10psi (0.7kg/cm²).

Order information

Pore Szie (μm)	Diameter（mm）					
	13	25	47	90	142	293
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk	25pcs/pk
0.1	M13NY010	M25NY010	M47NY010	M90NY010	M142NY010	M293NY010
0.22	M13NY022	M25NY022	M47NY022	M90NY022	M142NY022	M293NY022
0.45	M13NY045	M25NY045	M47NY045	M90NY045	M142NY045	M293NY045
0.65	M13NY065	M25NY065	M47NY065	M90NY065	M142NY065	M293NY065
0.8	M13NY080	M25NY080	M47NY080	M90NY080	M142NY080	M293NY080
1.0	M13NY100	M25NY100	M47NY100	M90NY100	M142NY100	M293NY100
3.0	M13NY300	M25NY300	M47NY300	M90NY300	M142NY300	M293NY300
5.0	M13NY500	M25NY500	M47NY500	M90NY500	M142NY500	M293NY500
10.0	M13NY1000	M25NY1000	M47NY1000	M90NY1000	M142NY1000	M293NY1000

Membrane Filter

Lab Filtration

CA

Introduction

High flow rates and thermal stability with very low adsorption characteristics and are therefore excellently suited for use in pressure filtration devices. The membrane with 0.2μm is the filter of choice for sterile filtration of aqueous solutions,such as nutrient media, buffers and sera.The results of publications on adsorption are difficult to correlate,as mostly different test substances,conditions and detection methods were used.

Product Specifications

Material	CA (Cellulose Acetate)Membrane Filter								
Wettability	Hydrophilic		PH		6-13		Thickness		110±10
Diameter	13mm, 25mm, 47mm, 90mm, 142mm, 293mm								
Pore Size(μm)	0.1	0.22	0.45	0.8	1.0	1.2	3.0	5.0	8.0
Minimum Bubble Point (Mpa)	0.56	0.28	0.18	0.095	0.08	0.06	0.05	0.04	0.02
Typical Flow Rate, (mL/min/cm²)	⩾8	⩾25	⩾40	⩾80	⩾153	⩾220	⩾290	⩾400	⩾600

Note: Typical flow rate test under the pressure 10psi (0.7kg/cm²).

Order information

Pore Szie (μm)	Diameter（mm）					
	13	25	47	90	142	293
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk	25pcs/pk
0.1	M13CA010	M25CA010	M47CA010	M90CA010	M142CA010	M293CA010
0.22	M13CA022	M25CA022	M47CA022	M90CA022	M142CA022	M293CA022
0.45	M13CA045	M25CA045	M47CA045	M90CA045	M142CA045	M293CA045
0.8	M13CA080	M25CA080	M47CA080	M90CA080	M142CA080	M293CA080
1.0	M13CA100	M25CA100	M47CA100	M90CA100	M142CA100	M293CA100
1.2	M13CA120	M25CA120	M47CA120	M90CA120	M142CA120	M293CA120
3.0	M13CA300	M25CA300	M47CA300	M90CA300	M142CA300	M293CA300
5.0	M13CA500	M25CA500	M47CA500	M90CA500	M142CA500	M293CA500
8.0	M13CA800	M25CA800	M47CA800	M90CA800	M142CA800	M293CA800

Membrane Filter

Hydrophilic PTFE

Introduction

Hydrophilic and ideal for aqueous samples filtration that need higher flow rates and larger volume, including clarification or sterilization of aqueous solutions,particulate analysis and removal,air monitoring,microbial analysis cytology,HPLC samples prep/clean up,virus concentration,biological assays, food microbiology (enumeration of E. coli in foods),bacteriological studies.

Product Specifications

Material	PTFE (Teflon) Membrane Filter with PP Support layer				
Wettability	Hydrophilic	PH	1-14	Thickness	160±10
Diameter	13mm, 25mm, 47mm, 90mm, 142mm				
Pore Size(μm)	0.1	0.22	0.45	1.0	
Minimum Bubble Point (Mpa)	0.16	0.12	0.07	0.035	
Typical Flow Rate, (mL/min/cm²)	⩾1.7	⩾5.0	⩾6.7	⩾13.3	

Note: Typical flow rate test under the pressure 10psi (0.7kg/cm²).

Order information

Pore Szie (μm)	Diameter（mm）				
	13	25	47	90	142
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk
0.1	M13PTL010	M25PTL010	M47PTL010	M90PTL010	M142PTL010
0.22	M13PTL022	M25PTL022	M47PTL022	M90PTL022	M142PTL022
0.45	M13PTL045	M25PTL045	M47PTL045	M90PTL045	M142PTL045
1.0	M13PTL100	M25PTL100	M47PTL100	M90PTL100	M142PTL100

Membrane Filter

Lab Filtration

PTFE

Introduction

Hydrophobic and perfect for organic solvent-based,acidic or basic samples and all solvents,such as aggressive solvents,strong acids and bases,alcohols,and aromatics. Chemically resistant to all solvents and has an excellent thermal stability to high temperature fluids. It can be used with aqueous samples after pre-wetting with small amount of alcohol and then flushing with water.

Product Specifications

Material	PTFE (Teflon) Membrane Filter with PP Support layer						
Wettability	Hydrophobic	PH	1-14	Thickness	160±10		
Diameter	13mm, 25mm, 37mm, 47mm, 90mm, 142mm						
Pore Size（μm）	0.1	0.22	0.45	1.0	2.0	30	5.0
Minimum Bubble Point (Mpa)	0.15	0.1	0.07	0.03	0.015	0.017	0.018
Air Flow Rate (m^3/m^2*hr@ 0.01Mpa ,25℃)	⩾150	⩾600	⩾800	⩾1000	⩾1500	⩾1700	⩾1900

Order information

Pore Szie (μm)	Diameter（mm）					
	13	25	37	47	90	142
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk	25pcs/pk
0.1	M13PTB010	M25PTB010	M37PTB010	M47PTB010	M90PTB010	M142PTB010
0.22	M13PTB022	M25PTB022	M37PTB022	M47PTB022	M90PTB022	M142PTB022
0.45	M13PTB045	M25PTB045	M37PTB045	M47PTB045	M90PTB045	M142PTB045
1.0	M13PTB100	M25PTB100	M37PTB100	M47PTB100	M90PTB100	M142PTB100
2.0	M13PTB200	M25PTB200	M37PTB200	M47PTB200	M90PTB200	M142PTB200
3.0	M13PTB300	M25PTB300	M37PTB300	M47PTB300	M90PTB300	M142PTB300
5.0	M13PTB500	M25PTB500	M37PTB500	M47PTB500	M90PTB500	M142PTB500

Membrane Filter

MCE

Introduction

Hydrophilic and ideal for aqueous samples filtration that need higher flow rates and larger volume,including clarification or sterilization of aqueous solutions,particulate analysis and removal,air monitoring,microbial analysis,cytology,HPLC samples prep/clean up,virus concentration, biological assays,food microbiology (enumeration of E.coli in foods), bacteriological studies.

Product Specifications

Material	MCE (Mixed Cellulose)Membrane Filter								
Wettability	Hydrophilic		PH		6~13		Thickness		120±10
Diameter	13mm, 25mm, 47mm, 90mm, 142mm, 293mm								
Pore Size(μm)	0.1	0.22	0.45	0.8	1.0	1.2	3.0	5.0	8.0
Minimum Bubble Point (Mpa)	0.47	0.392	0.294	0.113	0.098	0.083	0.074	0.044	0.034
Typical Flow Rate, (mL/min/cm²)	⩾7	⩾10	⩾34	⩾124	⩾153	⩾182	⩾260	⩾330	⩾48

Note: Typical flow rate test under the pressure 10psi (0.7kg/cm²).

Order information

Pore Szie (μm)	Diameter（mm）					
	13	25	47	90	142	293
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk	25pcs/pk
0.1	M13MCE010	M25MCE010	M47MCE010	M90MCE010	M142MCE010	M293MCE010
0.22	M13MCE022	M25MCE022	M47MCE022	M90MCE022	M142MCE022	M293MCE022
0.45	M13MCE045	M25MCE045	M47MCE045	M90MCE045	M142MCE045	M293MCE045
0.8	M13MCE080	M25MCE080	M47MCE080	M90MCE080	M142MCE080	M293MCE080
1.0	M13MCE100	M25MCE100	M47MCE100	M90MCE100	M142MCE100	M293MCE100
1.2	M13MCE120	M25MCE120	M47MCE120	M90MCE120	M142MCE120	M293MCE120
3.0	M13MCE300	M25MCE300	M47MCE300	M90MCE300	M142MCE300	M293MCE300
5.0	M13MCE500	M25MCE500	M47MCE500	M90MCE500	M142MCE500	M293MCE500
8.0	M13MCE800	M25MCE800	M47MCE800	M90MCE800	M142MCE800	M293MCE800

Membrane Filter

Lab Filtration

Hydrophilic PVDF

Introduction

Hydrophilic PVDF is universal film, due to its broad chemical compatibility, PVDF is Excellent for HPLC and GC sample prep/clean up. It's feature is low protein binding and low UV It suitable for filtering both Organic and Aqueous Solutions. Especially for high protein recovery of other biomolecules.

Product Specifications

Material	PVDF (Polyvinylidene Fluoride) Membrane Filter				
Wettability	Hydrophilic	PH	1-13	Thickness	100±10
Diameter	13mm, 25mm, 47mm, 90mm, 142mm				
Pore Size(μm)	0.1		0.22		0.45
Minimum Bubble Point (Mpa)	0.2		0.1		0.04
Typical Flow Rate, (mL/min/cm²)	⩾5		⩾8.5		⩾18

Note: Typical flow rate test under the pressure 10psi (0.7kg/cm²).

Order information

Pore Szie (μm)	Diameter（mm）				
	13	25	47	90	142
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk
0.1	M13PVL010	M25PVL010	M47PVL010	M90PVL010	M142PVL010
0.22	M13PVL022	M25PVL022	M47PVL022	M90PVL022	M142PVL022
0.45	M13PVL045	M25PVL045	M47PVL045	M90PVL045	M142PVL045

Membrane Filter

PVDF

Introduction

PVDF can be supplied in hydrophobic types. Due to broad chemical compatibility, PVDF is excellent for HPLC and GC sample prep/clean up.And also suitable for organic solvent filtration.

Product Specifications

Material	PVDF (Polyvinylidene Fluoride) Membrane Filter				
Wettability	Hydrophobic	PH	1-13	Thickness	100±10
Diameter	13mm, 25mm, 47mm, 90mm, 142mm				
Pore Size(μm)	0.1	0.22	0.45	3.0	5.0
Minimum Bubble Point (Mpa)	0.14	0.1	0.05	0.018	0.01
Typical Flow Rate, (mL/min/cm²)	⩾5	⩾8.5	⩾18	⩾122	⩾244

Note: Typical flow rate test under the pressure 10psi (0.7kg/cm²).

Order information

Pore Szie (μm)	Diameter（mm）				
	13	25	47	90	142
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk
0.1	M13PVB010	M25PVB010	M47PVB010	M90PVB010	M142PVB010
0.22	M13PVB022	M25PVB022	M47PVB022	M90PVB022	M142PVB022
0.45	M13PVB045	M25PVB045	M47PVB045	M90PVB045	M142PVB045
3.0	M13PVB300	M25PVB300	M47PVB300	M90PVB300	M142PVB300
5.0	M13PVB500	M25PVB500	M47PVB500	M90PVB500	M142PVB500

Membrane Filter

Lab Filtration

PES

Introduction

Hydrophilic and excellent for tissue culture,media,and buffers due to very low protein and nucleic acid binding and excellent flow rates.The PES membrane shows better chemical resistance than cellulose acetate. It is widely used in clinical/toxicology,ion chromatography,ICP-MS,AAS,and capillary electrophoresis for strong bases,alcohols,proteins,peptides.

Product Specifications

Material	PES （Polyether Sulfone）Membrane Filter				
Wettability	Hydrophilic	PH	6~13	Thickness	100±15
Diameter	13mm, 25mm, 47mm, 90mm, 142mm, 293mm				
Pore Size（μm）	0.1		0.22		0.45
Minimum Bubble Point (Mpa)	0.039		0.024		0.02
Typical Flow Rate, (mL/min/cm²)	⩾6		⩾12		⩾30

Note: Typical flow rate test under the pressure 10psi (0.7kg/cm²).

Order information

Pore Szie (μm)	Diameter（mm）				
	13	25	47	90	142
	400pcs/pk	200pcs/pk	100pcs/pk	100pcs/pk	50pcs/pk
0.1	M13PES010	M25PES010	M47PES010	M90PES010	M142PES010
0.22	M13PES022	M25PES022	M47PES022	M90PES022	M142PES022
0.45	M13PES045	M25PES045	M47PES045	M90PES045	M142PES045

Roll Membrane

Microlab Scientific supplys the Roll Membrane Filters with an accurately controlled pore size distribution and higher strength and flexibility,which ensure reproducibility and consistency.Nylon,PES,PVDF,PTFE,MCE,CA, and so on are available. The width is ranges from 260-300mm. All the Membrane rolls are produced and packed with good manufacturing practices.

Nylon

Introduction

- Hydrophilic property.
- No need to moist beforehand.
- Strong tenacity and adsorbability.
- Applicable PH value 3-12.

Applications

- Electric semiconductor industrial water filtration.
- Chemicals filtration.
- Beverage filtration.

Technical Specification

Membrane	Hydrophilic Nylon66	
Color	White	
Filter Surface	Plain	
Thickness(μm)	120±20	
Pore Size(μm)	0.1, 0.22, 0.45, 1.0, 3.0, 5.0	
Maximum Operating Pressure	75	
PH	6~13	
Flow Rate(25 ℃ Δ p = 0.07 Mpa (mL/min/cm2)	0.22 μm	7.5
	0.45 μm	14
Bubble Point	0.22 μm	0.28Mpa
	0.45 μm	0.18Mpa

Order Information

Catalog No.	Description
MNY280022	Nylon membrane, pore size:0.22μm，280mm*100m
MNY280045	Nylon membrane, pore size:0.45μm，280mm*100m

Roll Membrane

Lab Filtration

CA

Introduction

- Lowest protein binding.
- Uniform aperture.
- Hydrophilic property.
- Applicable PH value 4-8.

Application

- Aqueous protein solutions as low protein binding.
- Ground water filtration as Nitrate-free.

Technical Specification

Membrane	CA	
Color	White	
Filter Surface	Plain	
Thickness(μm)	150±20	
Width(mm)	280mm	
Pore Size(μm)	0.1, 0.22, 0.45,1.0,3.0,5.0	
PH	1~14	
Maximum Operating Pressure	Forward: 4.2 bar @ 23℃ ; 1.5 bar @ 85℃	
Flow Rate	0.22 μm	⩾6 mL/min/cm^2 at 1 bar
	0.45 μm	⩾30 mL/min/cm^2 at 1 bar
Integrity Test-60% IPA/ water bubble point at 23 ℃	0.22 μm	⩾1000 mbar
	0.45 μm	⩾600 mbar

Ordering Information

Catalog No.	Description
MCA280022	Hydrophilic CA membrane, pore size:0.22μm，280mm*100m
MCA280045	Hydrophilic CA membrane, pore size:0.45μm，280mm*100m

Roll Membrane

Hydrophilic PTFE

Introduction

- Broad chemical compatibility.
- High throughputs and high flow rates.
- Good heat-resistance.
- Hydrophilic membrane suitable for filtering both aqueous solutions and organic solvents even mixed soltions.

Applications

- Organic solvent filtration.
- Filtration for harsh chemicals such as acids and bases.
- Sterile filtration for aqueous media.
- Filtration for strongly corrosive or oxidizing solutions.

Technical Specification

Membrane	Hydrophilic Polytetrafluoroethylene Membrane (PTFE)	
Support	PP	
Color	White	
Filter Surface	Plain	
Thickness(μm)	160±20	
Width	270mm	
Pore Size(μm)	0.1, 0.22, 0.45,1.0,3.0,5.0	
Maximum Operating Pressure	Forward: 4.2 bar @ 23°C; 1.5 bar @ 85°C	
Flow Rate	0.22 μm	⩾6 mL/min/cm^2 at 1 bar
	0.45 μm	⩾30 mL/min/cm^2 at 1 bar
Integrity Test-60% IPA/water bubble point at 23°C	0.22 μm	⩾1000 mbar
	0.45 μm	⩾ 600 mbar

Ordering Information

Catalog No.	Description
MPTL270022	Hydrophilic PTFEmembrane, pore size:0.22μm，270mm*100m
MPTL270045	Hydrophilic PTFEmembrane, pore size:0.45μm，270mm*100m

Roll Membrane

Lab Filtration

PTFE

Introduction

- Broad chemical compatibility.
- Strong chemical stability and inertia.
- Strong hydrophobicity.
- Applicable PH value 1-14.

Applications

- Organic solvent with strong chemical causticity filtration.
- Strong acid solvent filtration.
- Alkali solvent filtration.

Technical Specification

Membrane	PTFE	
Support	PP	
Color	White	
Filter Surface	Plain	
Thickness(μm)	150±20	
Width	270mm	
Pore Size(μm)	0.01(for air), 0.1, 0.22, 0.45,1.0,3.0,5.0	
Maximum Operating Pressure	Forward: 4.2 bar @ 23℃; 1.5 bar @ 85℃	
Flow Rate	Liquid	Air
0.22 μm	⩾6 mL/min/cm^2 at 1 bar	⩾3.5 L/min/cm^2 at 1 bar
0.45 μm	⩾30 mL/min/cm^2 at 1 bar	⩾7 L/min/cm^2 at 1 bar
Integrity Test-60% IPA/water bubble point at 23℃	0.22 μm	⩾ 1000 mbar
	0.45 μm	⩾ 600 mbar

Ordering Information

Catalog No.	Description
MPTB270022	PTFE membrane, pore size:0.22μm，270mm*100m
MPTB270045	PTFE membrane, pore size:0.45μm，270mm*100m

Roll Membrane

MCE

Introduction

- Uniform aperture.
- NO medium dropping.
- Thin texture.
- Little resistance.
- High filtration speed.
- Little absorption.
- Applicable PH value 4-8.

Applications

- Gas particulate and bacteria filtration and then inspect them.
- Oil particulate and bacteria filtration and inspect them.
- Alcohol particulate and bacteria filtration and inspect them.
- Other solvent particulate and bacteria filtration and inspect them.

Technical Specification

Membrane	MCE	
Color	White	
Filter Surface	Plain	
Thickness(μm)	100±20	
Width	280mm	
Pore Size(μm)	0.1, 0.22, 0.45, 1.0, 3.0, 5.0	
Maximum Operating Pressure	Forward: 4.2 bar @ 23 ℃ ; 1.5 bar @ 85 ℃	
PH	3.5~8	
Flow Rate	0.22 μm	⩾10 mL/min/cm^2 at 1 bar
	0.45 μm	⩾20 mL/min/cm^2 at 1 bar
Integrity Test-water bubble point at 23℃	0.22 μm	⩾3100 mbar
	0.45 μm	⩾1500 mbar

Order Information

Catalog No.	Description
MMCE280022	MCE membrane, pore size:0.22μm，280mm*100m
MMCE280045	MCE membrane, pore size:0.45μm，280mm*100m

Roll Membrane

Lab Filtration

Hydrophilic PVDF

Introduction

- Good heat-endurance and chemical stability.
- Hydrophobic property.
- Good chemical compatibility.
- Applicable PH value 1-14.

Applications

- Gas filtration.
- Vapor filtration.
- High-temperature filtration.
- Food industry.
- Medicine filtration.

Technical Specification

Membrane	Hydrophilic PVDF	
Color	White	
Filter Surface	Plain	
Thickness(μm)	100±20	
Width	270mm	
Pore Size(μm)	0.1, 0.22, 0.45, 1.0, 3.0, 5.0	
Maximum Operating Pressure	Forward: 4.2 bar @ 23 ℃ ; 1.5 bar @ 85℃	
PH	3.5~8	
Flow Rate	0.22 μm	⩾2 L/m2/hr at 0.20Mpa
	0.45 μm	⩾3 L/m2/hr at 0.20Mpa
Integrity Test-water bubble point at 23 ℃	0.22 μm	⩾3100 mbar
	0.45 μm	⩾1500 mbar

Ordering Information

Catalog No.	Description
MPVL270022	Hydrophilic PVDF membrane, pore size:0.22μm，270mm*100m
MPVL270045	Hydrophilic PVDF membrane, pore size:0.45μm，270mm*100m

Roll Membrane

PVDF

Introduction

- Good heat-endurance and chemical stability.
- Hydrophobic property.
- Good chemical compatibility.
- Applicable PH value 1-14.

Applications

- Gas filtration.
- Vapor filtration.
- High-temperature filtration.
- Food industry.
- Medicine filtration.

Technical Specification

Membrane	PVDF	
Color	White	
Filter Surface	Plain	
Thickness(μm)	100±20	
Width	270mm	
Pore Size(μm)	0.1, 0.22, 0.45	
Maximum Operating Pressure	Forward: 4.2 bar @ 23℃; 1.5 bar @ 85℃	
PH	3.5~8	
Flow Rate	0.22 μm	⩾3 mL/min/cm^2 at 1 bar
	0.45 μm	⩾7 mL/min/cm^2 at 1 bar
Integrity Test-water bubble point at 23℃	0.22 μm	⩾3100 mbar
	0.45 μm	⩾1500 mbar

Ordering Information

Catalog No.	Description
MPVB270022	PVDF membrane, pore size:0.22μm，270mm*100m
MPVB270045	PVDF membrane, pore size:0.45μm，270mm*100m

Roll Membrane

Lab Filtration

PES

Introduction

- High filtration speed.
- Low extractables.
- Lowest protein binding.
- Applicable PH value 1-14.

Applications

- Sterile filtering protein solution
- Tissue culture media filtration.
- Tissue culture additive filtration.

Technical Specification

Membrane	PES	
Color	White	
Filter Surface	Plain	
Thickness(μm)	120±20	
width	270mm	
Pore Size(μm)	0.1, 0.22, 0.45	
Maximum Operating Pressure	Forward: 4.2 bar @ 23℃ ; 1.5 bar @ 85℃	
PH	1~14	
Flow Rate	0.22 μm	⩾15 mL/min/cm^2 at 1 bar
	0.45 μm	⩾35 mL/min/cm^2 at 1 bar
Integrity Test-water bubble point at 23℃	0.22 μm	⩾3500 mbar
	0.45 μm	⩾2500 mbar

Ordering Information

Catalog No.	Description
MPES270022	PES membrane, pore size:0.22μm，270mm*100m
MPES270045	PES membrane, pore size:0.45μm，270mm*100m

Filter Paper

Qualitative Filter Paper

Introduction

- Made of 100% alpha cotton cellulose;Ash content 0.1%.
- Stable from PH 0~12;thermostable up to 120℃.
- Divided into fast, middle and slow speed.
- Diameter ranges from 7cm~18cm, and 60cm*60cm.
- Widely used in general laboratory filtration, liquid clarifications, analytical separations.
- Air and water analysis, rough sample preparation.

Product Specifications

Weight	Speed	Retention (μm)	Filtration Speed(s)	Diameter& Size	Ash Content(<%)
80g/㎡ (±4)	Fast	20~25	≤35	7, 9, 11, 12.5, 15, 18, 60*60cm	0.15
	Middle	15~20	35-70(Contain)	7, 9, 11, 12.5, 15, 18, 60*60cm	0.15
	Slow	10~15	70-140(Contain)	7, 9, 11, 12.5, 15, 18, 60*60cm	0.15

Order Information

	70mm	90mm	110mm	125mm	150mm	180mm	60*60cm
Slow	QL0700S	QL0900S	QL1100S	QL1250S	QL1500S	QL1800S	QL6600S
Medium	QL0700M	QL0900M	QL1100M	QL1250M	QL1500M	QL1800M	QL6600M
Fast	QL0700F	QL0900F	QL1100F	QL1250F	QL1500F	QL1800F	QL6600F
Package:100pcs/pk							

Filter Paper

Quantitative Filter Paper

Introduction

- Made of high quality alpha cellulose content.
- Ash content less than 0.01%.
- Range from 70mm to 185mm diameter, divided into low, medium and fast speed.
- Acid washed and rinsed with ultrapure water to neutralize.
- Recommended for quantitative analysis, routine gravimetric tests and sample preparation for instrumental analysis.

Product Specifications

Weight	Speed	Retention(μm)	Filtration Speed(s)	Diameter(mm)	Ash Content(<%)
80g/㎡ (±4)	Fast	20~25	≤35	7, 9, 11, 12.5, 15, 18	0.01
	Middle	15~20	35-70(Contain)	7, 9, 11, 12.5, 15, 18	0.01
	Slow	10~15	70-140(Contain)	7, 9, 11, 12.5, 15, 18	0.01

Filtration speed is the time for filtering 10ml（23±1℃）distillated water through 10cm³ filter paper.
Wet Bursting Strength is measured by wet bursting strength instrument LSY-100

Order Information

	70mm	90mm	110mm	125mm	150mm	180mm
Slow	QT0700S	QT0900S	QT1100S	QT1250S	QT1500S	QT1800S
Medium	QT0700M	QT0900M	QT1100M	QT1250M	QT1500M	QT1800M
Fast	QT0700F	QT0900F	QT1100F	QT1250F	QT1500F	QT1800F
Package:100pcs/pk						

Thimbles

Extraction Thimbles

Introduction

Microlab Scientific offers a wide selection of high quality extraction thimbles available in a variety of dimensions to fit most soxhlet extraction units.Our extraction thimbles are manufactured in high purity cellulose fibers or high purity glass binder free microfiber. They also feature a consistent wall thickness customized manufacturing is available for tubes, sleeves and additional sizes.They also feature a consistent wall thickness customized manufacturing is available for tubes, sleeves and additional sizes.

Common Thimble Applications

- Soxhlet extraction.
- Air and waste gas analysis.
- Collection of solid particles such as dust.
- Smoke stack gas monitoring.
- Analysis of pesticide residues.
- Oil/fat content of solid foods.
- Oil & grease analysis of solid wastes.
- Elution for biochemical analysis.

Common Thimble Material Application Reference

Cellulose Extraction Thimbles	Glass microfiber Extraction Thimbles
Fat determination of meat and dairy products	Gravimetric methods for hot environments
Determination of PCB in fish products	Gravimetric methods for acidic gasses
Determination of free fats in food products	Extraction methods common to biochemical analysis
Determination of pesticide residues in food products	
Extraction of plasticizers from PVC	
Extraction of dioxins	
Solid particle such as dust collection in air flows	
Evaluation of liquid content in concrete slurry	

Technical Specifications for Cellulose Extraction Thimbles

Type of Extraction Thimbles	Max temperature (ºC)	Binder	Wall thickness (mm)
Cellulose	120	None	1-3
Glass Microfiber	500	None	2.0

Order Information

Celluose

Product Catalog #	Size (mm) OD*Length	Wall Thickness（mm）	Packing（pcs)
ETC1733	17*33	1.0-1.5	25
ETC1990	19*90	1.5-2.0	25
ETC2260	22*60	1.5-2.0	25
ETC2660	26*60	1.5-2.0	25
ETC2780	27*80	1.5-2.0	25
ETC3060	30*60	1.5-2.0	25
ETC30100	30*100	1.5-2.0	25
ETC3380	33*80	1.5-2.0	25
ETC3480	34*80	1.5-2.0	25
ETC3680	36*80	2.0-2.5	25
ETC36100	36*100	2.0-2.5	25
ETC37130	37*130	2.0-2.5	25
ETC41150	41*150	2.5-3.0	25
ETC58170	58*170	2.5-3.0	25
ETC70240	70*240	2.5-3.0	25

Glass Microfiber

Product Catalog #	Size (mm) OD*Length	Wall Thickness（mm）	Packing（pcs)
ETG32120	32*120	2	20
ETG2590	25*90	2	25
ETG2870	28*70	2	30

Product packaging

Filter Paper

Glass Fiber Filter

Introduction

- Made of 100% borosilicate glass fiber without binders or with binders.
- Glass fiber filters absorb the finest particles down to 1 µm from liquids, in air, gases and even aerosols with 0.3-0.5 µm are separated.
- The large surface area (about 2m²/g) provides an outstanding retention capacity.
- Chemical stability:It keeps all ite properties in contact with acid solutions (except hydrofluoric acid)and/or basic solutions at moderate concentrations.
- Extremely low metal content.
- Stability at high temperatures: It keeps its properties up to 500 °C.
- High flow speed and high permeability to air.

Order Information

	1.6µm	1.0µm	1.2µm	2.7µm	0.7µm	GF10
21mm	GFA021	GFB021	GFC021	GFD021	GFF021	GF10021
24mm	GFA024	GFB024	GFC024	GFD024	GFF024	GF10024
25mm	GFA025	GFB025	GFC025	GFD025	GFF025	GF10025
37mm	GFA037	GFB037	GFC037	GFD037	GFF037	GF10037
42.5mm	GFA042	GFB042	GFC042	GFD042	GFF042	GF10042
47mm	GFA047	GFB047	GFC047	GFD047	GFF047	GF10047
50mm	GFA050	GFB050	GFC050	GFD050	GFF050	GF10050
55mm	GFA055	GFB055	GFC055	GFD055	GFF055	GF10055
70mm	GFA070	GFB070	GFC070	GFD070	GFF070	GF10070
90mm	GFA090	GFB090	GFC090	GFD090	GFF090	GF10090
110mm	GFA110	GFB110	GFC110	GFD110	GFF110	GF10110
125mm	GFA125	GFB125	GFC125	GFD125	GFF125	GF10125
142mm	GFA142	GFB142	GFC142	GFD142	GFF142	GF10142
150mm	GFA150	GFB150	GFC150	GFD150	GFF150	GF10150
8*10 inches	GFA810	GFB810	GFC810	GFD810	GFF810	GF10810

Sterifil™ Syringe Filter

Introduction

Sterifil Syringe Filter is individually packed and pre-sterilized filters by Gamma Ray for biological solutions.

Application

- Tissue culture media and additives.
- Buffers.
- Biological solutions.

Technical Specification

Parameters	13mm		25mm		30/33mm	
Filtration area (cm²)	0.92		3.9		4.9	
Normal Pore Size(μm)	0.22	0.45	0.22	0.45	0.22	0.45
Holdup volume (μl)	<10		<100		<100	
Sample volume (ml)	<10		<120		<200	
Inlet/Outlet	Female luer lock/Male luer slip					
Maximum Operating Temperature	50°C		50°C		50°C	
Maximum Operating Pressure (psi)	>87		>87		>87	
Sterilization	Gamma Radiation					
Radicalization Computation	4K (Dmin)					
Testing Method	GB15979-1995					
period of validity	3 years					

Order Information

	13mm		25mm		33mm	
	0.22μm	0.45μm	0.22μm	0.45μm	0.22μm	0.45μm
NY	S13NY022S	S13NY045S	S25NY022S	S25NY045S	S33NY022S	S33NY045S
CA	S13CA022S	S13CA045S	S25CA022S	S25CA045S	S33CA022S	S33CA045S
MCE	S13MCE022S	S13MCE045S	S25MCE022S	S25MCE045S	S33MCE022S	S33MCE045S
PES	S13PES022S	S13PES045S	S25PES022S	S25PES045S	S33PES022S	S33PES045S
PTFE	S13PTB022S	S13PTB045S	S25PTB022S	S25PTB045S	S33PTB022S	S33PTB045S
Hydrophilic PTFE	S13PTL022S	S13PTL045S	S25PTL022S	S25PTL045S	S33PTL022S	S33PTL045S
PVDF	S13PVB022S	S13PVB045S	S25PVB022S	S25PVB045S	S33PVB022S	S33PVB045S
Hydrophilic PVDF	S13PVL022S	S13PVL045S	S25PVL022S	S25PVL045S	S33PVL022S	S33PVL045S
RC	S13RC022S	S13RC045S	S25RC022S	S25RC045S	S33RC022S	S33RC045S
PP	S13PP022S	S13PP045S	S25PP022S	S25PP045S	S33PP022S	S33PP045S
	0.7μm	1.0μm	0.7μm	1.0μm	0.7μm	1.0μm
GF	S13GF070S	S13GF100S	S25GF070S	S25GF100S	S33GF070S	S33GF100S

Sterile Gridded Membrane Filter

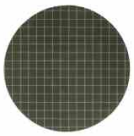
Introduction

- Composition: mixed cellulose esters including cellulose nitrate and cellulose acetate.
- Color: Black, White. Diameter:47mm, 50mm.
- High porosity provides superior flow rates.
- High protein binding can be blocked by pretreatment or utilized in applications.
- High purity:Triton-free.
- Hydrophilic Gridded filters have clearly defined grid lines spaced at 3.1mm intervals.
- Gamma sterilization.

How to choose right membrane?

Step 1, choose the right color

White gridded disks are designed for General Purpose Examination of all Microorganisms, the recovery and retention of *E. Coli* bacteria in water/waste water analysis as well as other microbiological tests.

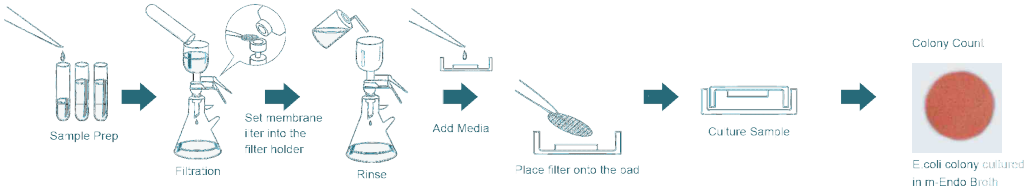


Black gridded disks to assist in manual counting procedures, analysis of yeast and mold and *Legionella* sp. Examination of White, beige colonies. Providing contrast between residue or cell colors and the filter without having to counter-stain the membrane.

Step 2, choose the right pore size

Application	Color	Size(μm)
Sterilizing filtration, bioassays.	White	0.22
Clarification of aqueous solutions, particle removal and analysis,microbiology analysis.	White	0.45
Fluorescent bacteriological assays,particle monitoring,biossays.	Black	0.45
Particle monitoring,particle removal,dairy microbiology,retention of yeasts, molds and algae.	White	0.65
Air monitoring, particle monitoring, particle removal, bioassays.	White	0.8
Fluorescent assays,particle monitoring,air monitoring.	Black	0.8
Clarification of aqueous solutions.	White	1
QC of fluid holding tanks,fluid monitoring,air monitoring,particle collection and analysis.	White	3
QC of fluid holding tanks,fluid monitoring,particle collection and analysis.	White	5

Step 3, Process Step by Step.



Order Information

Item No.	Membrane Color	Diameter(mm)	Pore Size(μm)	With Pad
M47MCE022GWS	White	47	0.22	No
M47MCE045GWS	White	47	0.45	No
M47MCE080GWS	White	47	0.8	No
M50MCE022GWS	White	50	0.22	No
M50MCE045GWS	White	50	0.45	No
M50MCE080GWS	White	50	0.8	No
M47MCE022GWSP	White	47	0.22	Yes
M47MCE045GWSP	White	47	0.45	Yes
M47MCE080GWSP	White	47	0.8	Yes
M47MCE022GBS	Black	47	0.22	No
M47MCE045GBS	Black	47	0.45	No
M47MCE080GBS	Black	47	0.8	No
M50MCE022GBS	Black	50	0.22	No
M50MCE045GBS	Black	50	0.45	No
M50MCE080GBS	Black	50	0.8	No

Note: Other pore sizes are available.

Continuous packed 150pcs/pk.

Item No.	Membrane Color	Diameter(mm)	Pore Size(μm)	With Pad
M47MCE045CW	White	47	0.45	No

Inoculating Loop & Needles

Introduction

- Made of PS or ABS.
- Size: 1μm and 10μm.

Order Information

Item No.	Description	Size	Material	Sterile	Package
IL0001N	Inoculation Loop	1μl	PS	No	1000pcs/pk,10pks/cs
IL0001S	Inoculation Loop	1μl	PS	Yes	1pcs/pk,500pks/cs
IL0010N	Inoculation Loop	10μl	PS	No	1000pcs/pk,10pks/cs
IL0010S	Inoculation Loop	10μl	PS	Yes	1pcs/pk,500pks/cs
IL1001N	Inoculation Loop	1μl+10μl	PS	No	1000pcs/pk,10pks/cs
IL1001S	Inoculation Loop	1μl+10μl	PS	Yes	1pcs/pk,500pks/cs

Cellulose Absorbent Pad

Introduction

- Consists of 100% Cellulose pad.
- Various thickness from 0. 6-1. 0mm.
- None Sterile and Gamma Sterile are available.
- Ideal for culturing micro organisms on either agar or broth based media.

Order Information

Part No.	Description	Diameter(mm)	Packing(pcs/pk)
AP047N	Non-Sterile Absorbent Pad, White	47	100
AP047S	Sterile Absorbent Pad, White, Individually Packed	47	100

Petri Dish

Introduction

- Made of high quality polystyrene, with lid.
- Widely used for culturing of bacteria and other microorganisms. Vented for exchanging gas.
- Stacking ring on the top and bottom for easier handling and stacking.
- Available with 35mm, 60mm, 70mm, 90mm and 150mm diameter.
- EO Sterile and Gamma Sterile are available.

Order Information

EO Sterile

Item No.	Description	Bag Qty(pcs/bag)	Case Qty(pcs/cs)
MLPD035ES	PS Petri Dishes, 35x15mm, standard round, EO sterile	10	2000
MLPD060ES	PS Petri Dishes, 60x15mm, standard round, EO sterile	10	1000
MLPD070ES	PS Petri Dishes, 70x15mm, standard round, EO sterile	10	800
MLPD090ES	PS Petri Dishes, 90x15mm, standard round, EO sterile	10	500
MLPD150ES	PS Petri Dishes, 150x15mm, standard round, EO sterile	10	200

Gamma Sterile

Item No.	Description	Bag Qty(pcs/bag)	Case Qty(pcs/cs)
MLPD035GS	PS Petri Dishes, 35x15mm, standard round, Gamma sterile	10	2000
MLPD060GS	PS Petri Dishes, 60x15mm, standard round, Gamma sterile	10	1000
MLPD070GS	PS Petri Dishes, 70x15mm, standard round, Gamma sterile	10	800
MLPD090GS	PS Petri Dishes, 90x15mm, standard round, Gamma sterile	10	500
MLPD150GS	PS Petri Dishes, 150x15mm, standard round, Gamma sterile	10	200

Filter Moniter

Introduction

- Made of polystyrene.
- Consist of a measured filter funnel, base, MCE gridded membrane, pad, removable lid and plug.
- Use for monitoring contaminants in liquids, easy to convert into a petri dish.
- Both white and black gridded MCE membrane are available.
- Pore Size:0.22μm,0.45μm,0.8μm. Diameter: 47mm. Volume: 100ml.
- Individually packed, gamma sterile.

Order Information

White MCE Gridded Membrane

Cat.No.	Description	Packing
FM47MCE022S	Filter Monitor, MCE Gridded, Diameter:47mm, 0.22um, Sterile, Individual packed	50
FM47MCE045S	Filter Monitor, MCE Gridded, Diameter:47mm, 0.45um, Sterile, Individual packed	50
FM47MCE080S	Filter Monitor, MCE Gridded, Diameter:47mm, 0.8um, Sterile, Individual packed	50

Black MCE Gridded Membrane

Cat.No.	Description	Packing
FM47MCE022BS	Filter Monitor, Black MCE Gridded, Diameter:47mm, 0.22um, Sterile, Individual packed	50
FM47MCE045BS	Filter Monitor, Black MCE Gridded, Diameter:47mm, 0.45um, Sterile, Individual packed	50

Disposable Vacuum Filtration System

Introduction

- The system include a polystyrene funnel with a polyethylene neck and a removable polystyrene storage bottle.
- Volumes: 150ml, 250ml, 500ml and 1000ml.
- Filter Membranes: Nylon,PES,Hydrophilic
- PVDF/MCE/CA.
- Pore Size: 0. 22μm and 0. 45μm.
- Widely used for filtering and storing cell culture media,biological fluids and other aqueous solutions.
- Gamma Sterilized.

Order Information

Complete system, contain funnel and storage bottle.12pcs/cs						
		NY	PES	CA	MCE	Hydrophilic PVDF
150ml	0.22	VFPNY150022	VFPPES150022	VFPCA150022	VFPMCE150022	VFPPVL150022
150ml	0.45	VFPNY150045	VFPPES150045	VFPCA150045	VFPMCE150045	VFPPVL150045
250ml	0.22	VFPNY250022	VFPPES250022	VFPCA250022	VFPMCE250022	VFPPVL250022
250ml	0.45	VFPNY250045	VFPPES250045	VFPCA250045	VFPMCE250045	VFPPVL250045
500ml	0.22	VFPNY500022	VFPPES500022	VFPCA500022	VFPMCE500022	VFPPVL500022
500ml	0.45	VFPNY500045	VFPPES500045	VFPCA500045	VFPMCE500045	VFPPVL500045
1000ml	0.22	VFPNY1000022	VFPPES1000022	VFPCA1000022	VFPMCE1000022	VFPPVL1000022
1000ml	0.45	VFPNY1000045	VFPPES1000045	VFPCA1000045	VFPMCE1000045	VFPPVL1000045
Funnel 24pcs/cs						
		NY	PES	CA	MCE	Hydrophilic PVDF
150ml	0.22	VFPNY150022T	VFPPES150022T	VFPCA150022T	VFPMCE150022T	VFPPVL150022T
150ml	0.45	VFPNY150045T	VFPPES150045T	VFPCA150045T	VFPMCE150045T	VFPPVL150045T
250ml	0.22	VFPNY250022T	VFPPES250022T	VFPCA250022T	VFPMCE250022T	VFPPVL250022T
250ml	0.45	VFPNY250045T	VFPPES250045T	VFPCA250045T	VFPMCE250045T	VFPPVL250045T
500ml	0.22	VFPNY500022T	VFPPES500022T	VFPCA500022T	VFPMCE500022T	VFPPVL500022T
500ml	0.45	VFPNY500045T	VFPPES500045T	VFPCA500045T	VFPMCE500045T	VFPPVL500045T
1000ml	0.22	VFPNY1000022T	VFPPES1000022T	VFPCA1000022T	VFPMCE1000022T	VFPPVL1000022T
1000ml	0.45	VFPNY1000045T	VFPPES1000045T	VFPCA1000045T	VFPMCE1000045T	VFPPVL1000045T
Storage bottle, 24pcs/cs						
150ml				VFP150B		
250ml				VFP250B		
500ml				VFP500B		
1000ml				VFP1000B		

Nitrocellulose Blotting Membrane

Introduction

- 100% pure nitrocellulose.
- High Protein binding capacity.
- Consistent Capillary Rate and Tickness.
- Low background.

Application

- Western Blotting.
- Northern Blotting.
- Southern Blotting.
- Protein&immunoblotting.

Technical Specification

Pore Size	Bubble Point With Water	Thickness	Flow Rate For Water	Wetting With Water
0.22μm	0.4-0.5(mpa)	115μm±20	>30(ml/(min.cm²bar)	<1(secs)
0.45μm	0.23-0.26(mpa)	115μm±20	>50(ml/(min.cm²bar)	<1(secs)

Order Information

Code	Description	Filter Size
MSNC02230301	0.22μm Nitrocellulose Membranes	300mm×3000mm
MSNC04530301	0.45μm Nitrocellulose Membranes	300mm×3000mm

Filtration System

Glass Solvent Vacuum Filters

Introduction

- This product is made of high-quality extra hard glass. It is sparking and crystal-clear. Its thickness is even.
- The performance of withstanding voltage and its leakproofness is very good. Its size agrees with the international standard size.

Order Information:

Item	Description	Packing
GVF30010	1) 300ml Glass Funnel with cover 2) 1000ml Glass Solvent Collection 3) Stainless Steel Clamp 4) Solid Glass Frit Packaging: 28cmX29cmX29cm	1set
GVF30020	1) 300ml Glass Funnel with cover 2) 2000ml Glass Solvent Collection 3) Stainless Steel Clamp 4) Solid Glass Frit Packaging: 32cmX33cmX24cm	1set
GVF50020	1) 500ml Glass Funnel 2) 2000ml Glass Solvent Collection 3) Stainless Steel Clamp 4) Solid Glass Frit Packaging: 32cmX33cmX24cm	1set

Filtration System

Multiple Vacuum Filtration System

Introduction

- Each station uses separate control valve for independent operation, easy to use and disinfect with a high efficiency.
- This system can filtrate three or six samples at the same time at low rate, with a high sensitivity.
- Sturdy won't tip when full loaded due to the units with low center of gravity.
- Anodized aluminium handles at both ends are designed for positioning on bench top.
- All MVFseries vacuum filtration devices are made of stainless steel which is suitable for filtration, especially in the microbiological field.

Part No.	Description	
MVF0101S	1) Stainless Steel Manifold 2) One 300ml Stainless Steel Filtration Units 3) One Glass Collect Bottle 4) Two pieces of hosepipe	
MVF0101G	1) Stainless Steel Manifold 2) One 300ml Glass Filtration Units 3) One Glass Collect Bottle 4) Two pieces of hosepipe	
MVF0103S	1) Stainless Steel Manifold 2) Three 300ml Stainless Steel Filtratio Units 3) One Glass Collect Bottle 4) Two pieces of hosepipe	
MVF0103G	1) Stainless Steel Manifold 2) Three 300ml Glass Filtration Units 3) One Glass Collect Bottle 4) Two pieces of hosepipe	
MVF0106S	1) Stainless Steel Manifold 2) Six 300ml Stainless Steel Filtration Units 3) One Glass Collect Bottle 4) Two pieces of hosepipe	
MVF0106G	1) Stainless Steel Manifold 2) Six 300ml Glass Filtration Units 3) One Glass Collect Bottle 4) Two pieces of hosepipe	

Part No.	Description	
MVFSM01	Stainless Steel Manifold, single	
MVFSM03	Stainless Steel Manifold, For Three Units	
MVFSM06	Stainless Steel Manifold, For Six Units	
MVFF300G	Glass Funnel, 300ml	
MVFF300S	Stainless Steel Funnel, 300ml	

Vacuum Pump

Introduction

- It can be in service under the condition of no working medium (no oil) and will not produce any pollution. Moreover, there is filtering material in the air exchange bin to guarantee the air clean.
- New technologies and materials are used in production. It is easy to move and can work smoothly, which can guarantee the ideal vacuum and high rate of air flowing.
- It adopts the operation containing no friction, producing no calories and having no friction exhausts. The diaphragm is made of Nitrile Rubber, which resists the corrosion and has long operating life.
- The self-cooling air draft system is designed in the body. This system can keep the machine continuously running for 24 hours.
- The pressure can be regulated by a value to meet various vacuum needs within certain range.
- The axletrees are classical, which are imported abroad. They have the features of steady running, low noise and high operating efficiency

Application

- Vacuum filtration.
- Vacuum distillation.
- Vacuum drying.
- On rotary evaporators.
- To extract and transfer gases.
- Gel drying.

Order Information & Technique Data

VP020			
Speed of Evacuation environment(L/Min)	12	Working Temp of pump body (℃)	<55
Dimensions (L x W x H)(mm)	245*120*160	Noise Level(DB)	<60
Weight(Kg)	4	Vacuum	250mbar
Voltage rating	220Vac, 50Hz	Inlet(mm)	Ø6
Motor power(w)	Single phase 75	Outlet(mm)	Ø6
Pump head	1	Temperature of working (℃)	7-40
Extreme pressure	⩾0.075Mpa	Positive pressure	⩾30Psi
Function		Vacuum&Pressure	

VP033A			
Speed of Evacuation environment(L/Min)	20	Working Temp of pump body (℃)	<55
Dimensions (L x W x H)(mm)	275*130*210	Noise Level (DB)	<60
Weight(Kg)	7	Vacuum	200mbar
Voltage rating	220Vac, 50Hz	Inlet (mm)	Ø6
Motor power(w)	160	Outlet (mm)	silencer
Pump head	1	Temperature of working (℃)	7-40
Extreme pressure	⩾0.08Mpa	Function	Vacuum

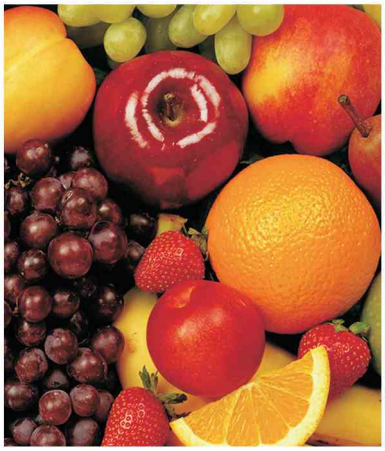
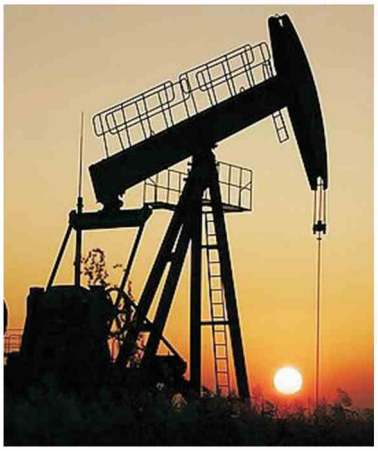
VP050A			
Speed of Evacuation environment(L/Min)	30	Working Temp of pump body（℃）	<55
Dimensions (L x W x H)(mm)	230*180*265	Noise Level（DB）	<60
Weight(Kg)	7.5	Vacuum	200mbar
Voltage rating	220Vac, 50Hz	Inlet (mm)	Ø6
Motor power(w)	160	Outlet (mm)	Ø6
Pump head	1	Temperature of working (℃)	7-40
Extreme pressure	⩾0.08Mpa	Diaphragm Values	NBR
Positive pressure	⩾30Psi	Function	Vacuum&Pressure

VP050B			
Speed of Evacuation environment(L/Min)	30	Working Temp of pump body（℃）	<55
Dimensions (L x W x H)(mm)	350*130*220	Noise Level（DB）	<60
Weight(Kg)	10	Vacuum	50mbar
Voltage rating	220Vac, 50Hz	Inlet (mm)	Ø6
Motor power(w)	160	Outlet (mm)	Ø6
Pump head	1	Temperature of working (℃)	7-40
Extreme pressure	⩾0.095Mpa	Function	Vacuum

VP100A			
Speed of Evacuation environment(L/Min)	60	Working Temp of pump body（℃）	<55
Dimensions (L x W x H)(mm)	310*200*210	Noise Level（DB）	<60
Weight(Kg)	10	Vacuum	200mbar
Voltage rating	220Vac, 50Hz	Inlet (mm)	Ø6
Motor power(w)	160	Outlet (mm)	Ø6
Pump head	2	Temperature of working (℃)	7-40
Extreme pressure	⩾0.08Mpa	Diaphragm Values	NBR
Positive pressure	⩾30Psi	Function	Vacuum&Pressure

MICROLAB SCIENTIFIC

HPLC Accessories


Autosampler Vials & Caps

Microlab scientific's autosampler vials, caps and septa can be compatible with kinds of autosamplers, including Agilent, Waters, Varian, Shimadzu, and etc...

- All the vials are uniformly flat bottom for security with inserts.
- PTFE/Silicone septa are most popular for HPLC applications.
- Pre-slit septa are easier to pierce with needles.
- Pre-assembled caps and septa are convenient and minimize contamination from handling.

HPLC Accessories

Vials&Cap

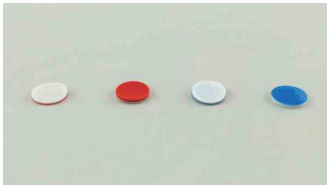
8-425 Autosampler Vials

P/N	Size(mm)	Packing	Description
SV0802C	12*32	100	2ml Clear Vial, 8-425,Screw top
SV0802A	12*32	100	2ml Amber Vial, 8-425,Screw top
SV0812C	12*32	100	2ml Clear Vial with writing area, 8-425,Screw top
SV0812A	12*32	100	2ml Amber Vial with writing area, 8-425,Screw top

8-425 Cap& Septa

P/N	Packing	Description
SV0801CS	100	8-425 Black Open Caps,White PTFE/ Red Sillicone
SV0802CS	100	8-425 Black Open Caps,Red PTFE/ White Sillicone
SV0803CS	100	8-425 Black Open Caps, Blue PTFE/ White Sillicone,Pre-silt

8 mm Septa

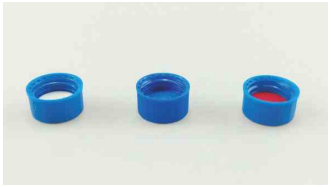


P/N	Packing	Description
SV0801S	100	8mm, White PTFE/ Red Sillicone Septa
SV0802S	100	8mm, Red PTFE/ White Sillicone Septa
SV0803S	100	8mm, Blue PTFE/ White Sillicone Pre-silt Septa

9-425 Autosampler Vials

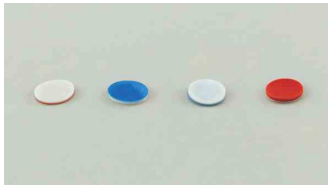
P/N	Size(mm)	Packing	Description
SV0902C	12*32	100	2ml Clear Vial, 9-425,Screw top
SV0902A	12*32	100	2ml Amber Vial, 9-425,Screw top
SV0912C	12*32	100	2ml Clear Vial with writing area, 9-425,Screw top
SV0912A	12*32	100	2ml Amber Vial with writing area, 9-425,Screw top
SV0912P	12*32	100	2ml PP vials graduated with writing area, 9-425,Screw top

9-425 Cap& Septa



P/N	Packing	Description
SV0901CS	100	9-425 Blue Open Caps,White PTFE/ Red Sillicone
SV0902CS	100	9-425 Blue Open Caps,Red PTFE/ White Sillicone
SV0903CS	100	9-425 Blue Open Caps, Blue PTFE/ White Sillicone ,Pre-silt
SV0904CS	100	9-425 Blue Open Bonded Caps,Red PTFE/White Sillicone, Pre-silt
SV0905CS	100	9-425 Blue Open Caps,Red PTFE/White Sillicone/Red PTFE Septa
SV0906CS	100	9-425 Blue Open Caps, Red PTFE/White Sillicone/Red PTFE Septa, Pre-silt
SV0907CS	100	9-425 Blue Closed Caps,Red PTFE/White Sillicone Septa,

9 mm Septa

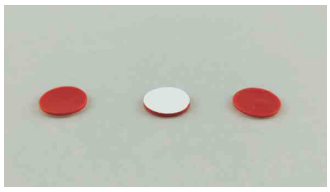


P/N	Packing	Description
SV0901S	100	9mm,White PTFE/ Red Sillicone Septa
SV0902S	100	9mm,Red PTFE/ White Sillicone Septa
SV0903S	100	9mm, Blue PTFE/ White Sillicone Septa
SV0904S	100	9mm,Red PTFE/White Sillicone/Red PTFE Septa
SV0905S	100	9mm,Red PTFE/White Sillicone/Red PTFE Pre-silt Septa

11mm Crimp Top Cap & Septa

P/N	Packing	Description
SV1101CS	100	11mm Aluminium Crimp Open Cap,White PTFE/Red Silicone
SV1102CS	100	11mm Aluminium Crimp Open Cap,Red PTFE/White Silicone

11mm Septa

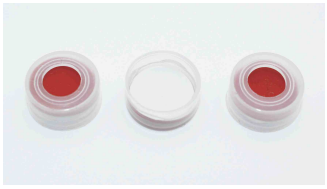


P/N	Packing	Description
SV1101S	100	11mm White PTFE/Red Silicone Septa
SV1102S	100	11mm Red PTFE/White Silicone Septa

11mm Snap Top Autosampler Vials

P/N	Size(mm)	Packing	Description
SV1202C	12*32	100	2ml Clear Vial, 11mm Snap Top
SV1202A	12*32	100	2ml Amber Vial, 11mm Snap Top
SV1212C	12*32	100	2ml Clear Vial with writing area, 11mm Snap Top
SV1212A	12*32	100	2ml Amber Vial with writing area, 11mm Snap Top

11mm Snap Cap& Septa



P/N	Packing	Description
SV1201CS	100	11mm Snap Open Caps+ White PTFE/Red silicone septa
SV1202CS	100	11mm Snap Open Caps+ Red PTFE/White silicone septa

11 mm Crimp Top Autosampler Vials

P/N	Size(mm)	Packing	Description
SV1102C	12*32	100	2ml Clear Vial, 11mm Crimp Top
SV1102A	12*32	100	2ml Amber Vial, 11mm Crimp Top
SV1112C	12*32	100	2ml Clear Vial with writing area, 11mm Crimp Top
SV1112A	12*32	100	2ml Amber Vial with writing area, 11mm Crimp Top

10-425 Autosampler Vials

P/N	Size(mm)	Packing	Description
SV1002C	12*32	100	2ml Clear Vial, 10-425,Screw top
SV1002A	12*32	100	2ml Amber Vial, 10-425,Screw top
SV1012C	12*32	100	2ml Clear Vial with writing area, 10-425,Screw top
SV1012A	12*32	100	2ml Amber Vial with writing area, 10-425,Screw top

10-425 Cap& Septa

P/N	Packing	Description
SV1001CS	100	10-425 Black Open Caps, White PTFE/ Red Sillicone
SV1002CS	100	10-425 Black Open Caps, Red PTFE/ White Sillicone

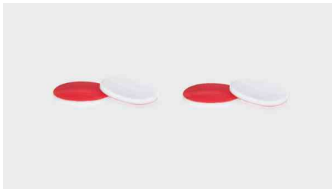
13-425 Autosampler Vials

P/N	Size(mm)	Packing	Description
SV1304C	15*45	100	4ml Clear Vial, 13-425,Screw top
SV1304A	15*45	100	4ml Amber Vial, 13-425,Screw top
SV1314C	15*45	100	4ml Clear Vial with writing area, 13-425,Screw top
SV1314A	15*45	100	4ml Amber Vial with writing area, 13-425,Screw top
SV1308C	15*45	100	8ml Clear Vial, 13-425,Screw top
SV1308A	15*45	100	8ml Amber Vial, 13-425,Screw top
SV1318C	15*45	100	8ml Clear Vial with writing area, 13-425,Screw top
SV1318A	15*45	100	8ml Amber Vial with writing area, 13-425,Screw top

13-425 Cap& Septa

P/N	Packing	Description
SV1301CS	100	13-425 Black Caps with hole, Red PTFE/ white sillicone
SV1302CS	100	13-425 Black Caps without hole, Red PTFE/ white sillicone

12mm Septa



P/N	Packing	Description
SV1301S	100	12mm White PTFE/ Red Silicone Septa
SV1302S	100	12mm Red PTFE/ White Silicone Septa
SV1303S	100	12mm Red PTFE/ white Silicone/ Red PTFE Septa

15-425 Autosampler Vials

P/N	Packing	Description
SV1512C	100	12ml Clear Vial, 15-425,Screw top
SV1512A	100	12ml Amber Vial, 15-425,Screw top

15-425 Cap& Septa

P/N	Packing	Description
SV1501CS	100	15-425 Black Caps with hole, Red PTFE/ white sillicone
SV1502CS	100	15-425 Black Caps without hole, Red PTFE/ white sillicone

5mm Micro Insert

P/N	Size(mm)	Packing	Description
SVI8010P	5*29	100	Micro-Insert clear class, conical bottom with assembled plastic spring
SVI8030F	5*31	100	Micro-Insert , clear class, flat bottom
SVI8030C	5*31	100	Micro-Insert, clear class, conical bottom

6mm Micro Insert

P/N	Size(mm)	Packing	Description
SVI9025P	6*29	100	Micro-Insert clear class, conical bottom with assembled plastic spring
SVI9030C	6*31	100	Micro-Insert, clear class, conical bottom
SVI9040F	6*31	100	Micro-Insert, clear class, flat bottom,
SVI903CP	6*31	100	Micro-Insert, pp , conical bottom

Shell Vials

P/N	Size(mm)	Packing	Description
SVS1001	8*40	200	1ml Shell Vials with Plug, Flat Base
SVS1002	8*30	200	1ml Shell Vials with Plug, Flat Base

Headspace Vials & Caps

All headspace vials are manufactured to provide uniform glass thickness, which insure even heat distribution for consistent sampling reliabity.
All vials meet or exceed OEM instrument manufactures' specification.

HPLC Accessories

Screw Top Headspace Vials

P/N	Size(mm)	Packing	Description
HV1810C	22.5*46	100	10ml Clear vial, 18mm screw top, round bottom
HV1820C	22.5*75.5	100	20ml Clear vial, 18mm screw top, round bottom

Screw Top Cap

P/N	Size(mm)	Packing	Description
SV018CS	18mm	100	Silver Magnetic screw cap with hole(8mm),Screw Top Blue PTFE/ White Silicone Septa(17.5mm),for 18mm screw top vial
SV118CS	18mm	100	Silver Magnetic screw cap without hole,Screw Top Blue PTFE/ White Silicone Septa(17.5mm),for 18mm screw top vial

Screw Top Septa

P/N	Size(mm)	Packing	Description
SV018S	17.5mm	100	Blue PTFE/ White Silicone Septa(17.5mm), for 18mm screw top vial
SV118S	17.5mm	100	White PTFE/ White Silicone Septa(17.5mm), for 18mm screw top vial

Crimp Top Headspace Vials

P/N	Size(mm)	Packing	Description
HV005CR	22.5*38	100	5ml Clear vial, crimp top, round bottom
HV010CF	22.5*46	100	10ml Clear vial, crimp top, flat bottom
HV110CR	22.5*46	100	10ml Clear vial, crimp top, round bottom
HV020CF	22.5*75	100	20ml Clear vial, crimp top, flat bottom
HV120CR	22.5*75	100	20ml Clear vial, crimp top, round bottom

Crimp Top Cap

P/N	Size(mm)	Packing	Description
HV020CS	20mm	100	20mm Aluminium cap with hole(8mm)+ 3mm Natural PTFE/ White Silicone Septa
HV120CS	20mm	100	20mm Aluminium cap with hole(8mm)+1.3mm Red PTFE/ White Silicone Septa.

Crimp Top Septa

P/N	Thickness	Packing	Description
HV020S	3mm	100	20mm Natural PTFE/ White Silicone,3mm thickness
HV120S	1.3mm	100	20mm Red PTFE/ White Silicone,1.3mm thickness

Storage Vials & EPA VOA

- Available in clear and amber borosilicate glass.
- Assembled in PP caps with PTFE/silicone septa.

Storage Vials

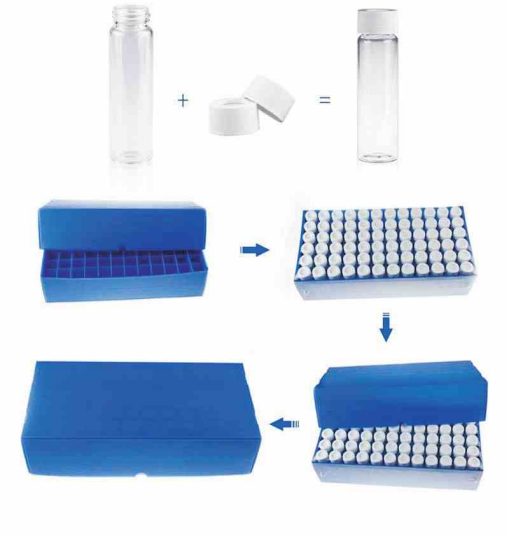
P/N	Size(mm)	Packing	Description
SV1810C	22*52	100	10ml Clear Vials, 18-400
SV1810A	22*52	100	10ml Amber Vials, 18-400,
SV1816C	22*70	100	16ml Clear Vials, 18-400
SV1816A	22*70	100	16ml Amber Vials, 18-400,
SV2410C	27*38	100	10ml Clear Vials, 24-400
SV2410A	27*38	100	10ml Amber Vials, 24-400,
SV2420C	27*57	100	20ml Clear Vials, 24-400
SV2420A	27*57	100	20ml Amber Vials, 24-400,
SV2430C	27*84	100	30ml Clear Vials, 24-400
SV2430A	27*84	100	30ml Amber Vials, 24-400,
SV2440C	27*95	100	40ml Clear Vials, 24-400
SV2440A	27*95	100	40ml Amber Vials, 24-400,
SV2460C	27*140	100	60ml Clear Vials, 24-400
SV2460A	27*140	100	60ml Amber Vials, 24-400,

Caps with septas

P/N	Size(mm)	Packing	Description
SV018CS	18-400	100	18-400 Black Closed Screw Cap+Nature PTFE/ Nature silicone septa
SV118CS	18-400	100	18-400 Black Screw Open Cap+ Nature PTFE/ Nature silicone septa
SV024CS	24-400	100	24-400 Black Screw Cap+ Nature PTFE/ Nature silicone septa
SV124CS	24-400	100	24-400 Black Screw Open Cap+ Nature PTFE/ Nature silicone septa
SV224CS	24-400	100	24-400 Black screw Cap+ PE septa
SV324CS	24-400	100	24-400 Black screw Open Cap+ PE septa

EPA VOA Vials

P/N	Size(mm)	Packing	Description
EV020C	27*57	72	20ml Clear Vials, 24-400, EPA VOA Vials, White Open Caps with Natural PTFE/ Natural Silicone
EV120C	27*57	72	20ml Clear Vials, 24-400, EPA VOA Vials, Dust cover Caps with Natural PTFE/ Natural Silicone
EV020A	27*57	72	20ml Amber Vials, 24-400, EPA VOA Vials, White Open Caps with Natural PTFE/ Natural Silicone
EV120A	27*57	72	20ml Amber Vials, 24-400, EPA VOA Vials, Dust cover Caps with Natural PTFE/ Natural Silicone
EV040C	27*95	72	40ml Clear Vials, 24-400, EPA VOA Vials, White Open Caps with Natural PTFE/ Natural Silicone
EV140C	27*95	72	40ml Clear Vials, 24-400, EPA VOA Vials, Dust cover Caps with Natural PTFE/ Natural Silicone
EV040A	27*95	72	40ml Amber Vials, 24-400, EPA VOA Vials, White Open Caps with Natural PTFE/ Natural Silicone
EV140A	27*95	72	40ml Amber Vials, 24-400, EPA VOA Vials, Dust cover Caps with Natural PTFE/ Natural Silicone
EV060C	27*140	72	60ml Clear Vials, 24-400, EPA VOA Vials, White Open Caps with Natural PTFE/ Natural Silicone
EV160C	27*140	72	60ml Clear Vials, 24-400, EPA VOA Vials, Dust cover Caps with Natural PTFE/ Natural Silicone
EV060A	27*140	72	60ml Amber Vials, 24-400, EPA VOA Vials, White Open Caps with Natural PTFE/ Natural Silicone
EV160A	27*140	72	60ml Amber Vials, 24-400, EPA VOA Vials, Dust cover Caps with Natural PTFE/ Natural Silicone



Accessories

Vials Rack

Acrylic vial racks are resistant to most solvents.
Transparent racks easy for cleaning.
Four sizes of racks suitable for all sample vials.

P/N	Size(mm)	Packing	Description
VR02	18*90*25	1	Vial Rack, 50#, Hole Dia. 12.5mm for 2ml Vial
VR04	230*112*30	1	Vial Rack, 50#, Hole Dia. 16.5mm for 4ml Vials
VR20	290*140*35	1	Vial Rack, 50#, Hole Dia. 22.5mm for Headspace Vials
VR24	350*173*45	1	Vial Rack, 50#, Hole Dia. 28.5mm for 24-400 Vials

Crimper and Decrimper

Crimpers provide a secure vial closure.
Manual decrimpers allow easy remove of aluminum seals without breakage.

P/N	Use	Packing	Description
CR11	Attaches 11mm aluminum crimp seals.	1	11mm Manual Crimper, stainless steel
CR20	Attaches 20mm aluminum crimp seals.	1	20mm Manual Crimper, stainless steel
DCR20	Removes 20mm aluminum crimp seals.	1	20mm Manual Decrimper, stainless steel

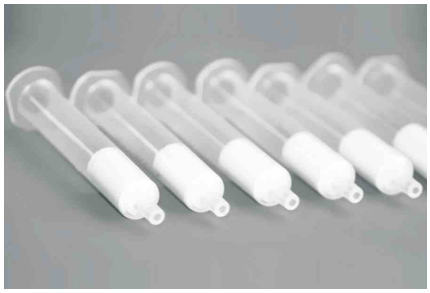
HPLC Syringes

P/N	Description
SY01	Disposable HPLC Syringe, 1ml, Slip
SY03	Disposable HPLC Syringe, 3ml, Slip
SY05	Disposable HPLC Syringe, 5ml, Slip
SY10	Disposable HPLC Syringe, 10ml, Slip
SY20	Disposable HPLC Syringe, 20ml, Slip
SY01L	Disposable HPLC Syringe, 1ml, Luer Lock
SY03L	Disposable HPLC Syringe, 3ml, Luer Lock
SY05L	Disposable HPLC Syringe, 5ml, Luer Lock
SY10L	Disposable HPLC Syringe, 10ml, Luer Lock
SY20L	Disposable HPLC Syringe, 20ml, Luer Lock

SPE Columns

Solid-phase extraction (SPE) is a separation process by which compounds that are dissolved or suspended in a liquid mixture are separated from other compounds in the mixture according to their physical and chemical properties. Analytical laboratories use solid phase extraction to concentrate and purify samples for analysis.Solid phase extraction can be used to isolate analytes of interest from a wide variety of matrices, including urine, blood, water, beverages,soil,and animal tissue.

SPE is solvent consumption, convenient, safe and hige efficiency. According the principle of "like dissolves like",SPE can be classified in four types:inverse SPE, normal phase SPE,ion exchange SPE,absotption SPE.



HPLC Accessories

Microlab offers SPE Columns to our customers, which have silica-based, organic copolymer or iroganic chemical based SPE columns. The filling material includes C18, NH_2, C8, Alumina, GCB, CN, Florisil, Si, SAX, SCX, PSA, PCX,PAX and so on. Column capacities consist of 1, 3, 6, and 10 ml sizes, etc. Our manufacturing process minimizes variability and improves recovery and cleanup procedures. SPE products have the following several characteristics.

Feature

- Available in a range of packing media.
- The quality sorbents for consistent results.
- With viarious packing, ensure better selectivity.

Applications

- Biological samples and natural compounds.
- Pharmaceuticals and Drugs.
- Pesticides and antibiotics in food and agricultural matrices.
- Environmental Samples, organic compounds and pollutants.

SPE Product

Silica-Based SPE	C18,C18-ne,C8,CN,PSA, NH_2,SAX,SCX,Silica
Polymer SPE	HLB,MCX,MAX, WAX,WCX
Adsorptive material SPE	Silica,Florisil,AL-A, AL-N,AL-B,GCB
Mixed Mode SPE	C8/SCX,C8/SAX/CARB-GCB/NH2,CARB-GCB/PSA

Silica Base

C18-ne

Partical Size: 40-60 μm.
Silica Base: irregular shaped.
Pore Size: 52-68 Å.
Endcapped: No.
Carbon(©%): 17%.

- Non-endcapped bonded phase that enables the silica surface to be more active.
- Moderately nonpolar and polar secondary interactions.
- Enhanced the retention of polar and basic compounds than C18.

C18

Partical Size: 40-60 μm.
Silica Base: irregular shaped.
Pore Size: 52-68 Å.
Endcapped: Yes.
Carbon(©%): 17%.

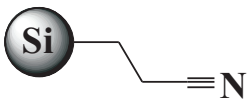
- Organic anlalytes extraction C18 has the broadest spectrum of retention among bonded silica sorbents, since it retains most organic analytes from aqueous matrices, when the compounds of interest vaty widely in structure.
- Desalting When analyzing small to intermediate molecules, chrompure C18 can be used for desalting aqueous matrices prior to ion exchange, as salts pass through the sorbent unretained.

C8

Partical Size: 40-60 μm.
Silica Base: irregular shaped.
Pore Size: 52-68 Å.
Endcapped: Yes.
Carbon(©%): 11%.

- Moderate Hydrophobicity: separating a wide range of compounds and replace C18 when too strongly retention on C18.
- Simultaneous Extraction:fat- and water-solution vitamins from human serum and herbicides,fungicides, pesticides from waste.

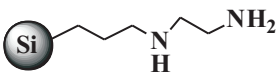
CN



Partical Size: 40-60 μm.
Silica Base: irregular shaped.
Pore Size: 52-68 Å.
Endcapped: Yes.
Carbon(©%): 6.5%.

- Both normal and reversed-phase chromatography.
- Less polar compared to silica and less hydrophobic compared to C18 and C8.
- Usually used to extract acidic, neutral, and basic compounds from aqueous solutions.

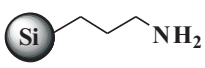
PSA



Partical Size: 40-60 μm.
Silica Base: irregular shaped.
Pore Size: 52-68 Å.
Endcapped: No.
Carbon(C%): 7%.
PK_a: 10.1 and 10.9.

- Similar selectivity to Chrompure NH_2.
- Strong affinity and high capacity for removing fatty acids, organic acids, and some polar pigments and sugars when conducting multi-residue pesticide analysis in foods.
- Excellent sorbent for chelation.

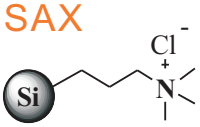
NH_2



Partical Size: 40-60μm.
Silica Base: irregular shaped.
Pore Size: 52-68Å.
Endcapped: No.
Carbon(C%): 3.5%.
PK_a: 9.8

- Aminopropyl phase,both hydrogen bonding and anion exchange.
- Weaker anion exchanger retention of very strong anions such as sulfonic acids which may be retained irreversibl on SAX.
- Separate peptides, drugs and metabolites from physiological fluids, and extraction of mono- and polysaccharides, steroids, cholesterol and triglycerides.

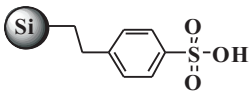
SAX



Partical Size: 40-60μm.
Silica Base: irregular shaped.
Pore Size: 52-68 Å.
Endcapped: No.
Carbon(C%): 7.5%.
PK_a: completely dissociated.

- Strongest anion exchange sorbent because of its quaternary amine functional group.
- Positive charged, better retention of weaker anions such as carboxylic acids that may not retain strongly enough on PSA or NH_2 .
- Activate the ion exchanger by conditioning it with appropriate bufers.

SCX



Partical Size: 40-60μm.
Silica Base: irregular shaped.
Pore Size: 52-68 Å.
Endcapped: No.
Carbon(C%): 10.9%.
PK_a<1.0.

- Strongest cation exchange sorbent because of its benzenesulfonic acid functional group.
- Optimized for use in organic applications.
- Nonpolar character exhibited by benzene ring is useful to compounds with both cationic and nonpolar properties in aqueous solvent.

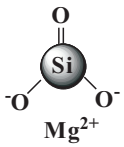
Inorganic Chemical Base

Si

Partical Size: 40-60 μm.
Silica Base: irregular shaped.
Pore Size: 52-68Å.
Endcapped: No.

- The most polar sorbent, one of the best sorbents available for selectively separating analytes of very similar structure.
- Extract various compounds from non-polar solvents using hydrogen bonding, accomplishing the elution successively with increasing the solvent polarity.
- Excellent capacity for removing target molecules from reaction by-products and excess reagents.

Florisil



Average Partical Size: 150-200μm.
Silica Base: irregular shaped.

- Florisil is a magnesia silica gel,a polar sorbent capable to extract polarcompounds from nonpolar matrix.
- Separate chlorinated pesticides, amines, herbicides,PCBs,ketones,organic acids and phenols.

Alumina-A

Al_2O_3

Acidic pH: ~4.5.
(Brockman Act. I)
Average Partical Size: 125μm.
Silica Base: irregular shaped.

- Alumina-A enhances Lewis acid properties, which makes the sorbent more retentive towards electron-rich compounds.
- Alumina-A has a slightly cationic nature through pretreatment with acidic solutions.
- Suitable for retention neutral and anionic species.

Alumina-B

Al_2O_3

Basic pH: ~10.0 .
(Brockman Act. I)
Average Partical Size: 125μm.
Silica Base: irregular shaped.

- Exhibits Lewis base properties, more retentive towards electron-donors compounds.
- The surface has a slightly anionic nature through pretreatment with acidic solutions.
- Suitable for retention of neutral and cationic compounds.
- Strong hydrogen bonding is also effective for polar cations.

Alumina-N
Al_2O_3

Neutral pH: ~7.5.
(Brockman Act. I)
Average Partical Size: 125μm.
Silica Base: irregular shaped.

- Extremely polar sorbent, similar to silica.
- More stable under high pH conditions than unbonded silica.
- An electrically neutral surface retentive for electron-rich compounds like aromatic species and aliphatic amines, and compounds with electronegative group like oxygen, phosphorus and sulfur atoms.
- Extrat both nonpolar and polar compounds from aqueous and nonaqueous matrics respectively.

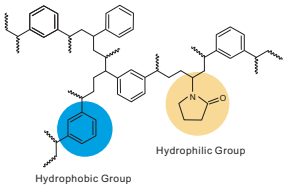
Carbon
GCB

Sorbent : laminated structure graphitized carbon
Average Partical Size: 120-400μm

- Higher and more stable recovery rates in extracting polar substance, like organolchlorine , organophosphorus and nitrogen pesticides.
- Excellent performance in oganic extraction and purification.
- Extremly rapid extract proccessing due to the few-porosity.

Organic Copolymer Base

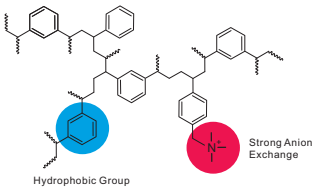
HLB



Surface area:600-800m²/g
Particle size: 80-100μm
Pore size: 70-90Å

- Copolymer of polystyrene/divinylbenzer contained both hydrophilic and hydrophobic radicals.
- Good retention on polar and non-polar molecule hydrophilelipophile balance.
- PLS has higher stability and widder pH range. Popular ultilised in food.

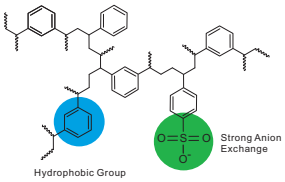
MAX



Surface area:600-800m²/g
Particle size: 80-100μm
Pore size: 70-90Å

- Sulfonic acid group bonding polystyrene/ divinylbenzene copolymer is mixed strong cation exchange sorbent. Both cation exchange and reverse phase retention mode,suitable for carboxylic acid compounds pKa between 2-8,mainly amonic compounds.

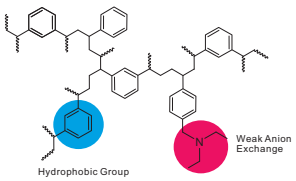
MCX



Surface area:600-800m²/g
Particle size: 80-100μm
Pore size: 70-90Å

- Quaternary ammonium group bonded copolymer is mixed anion exchange and reverse phase sorbent.
- Excellent extraction to purified acid, carboxy acid compounds, pKa between 2-8.

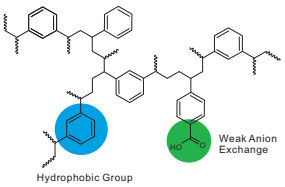
WAX



Surface area:600-800m²/g
Particle size: 80-100μm
Pore size: 70-90Å

- Quaternary ammonium group bonded copolymer is mixed anion exchange and reverse phase sorbent.
- Excellent extraction to purified acid, carboxy acid compounds, pKa between 2-8.

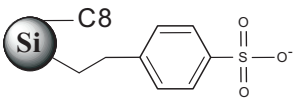
WCX



Surface area:600-800m²/g
Particle size: 80-100μm
Pore size: 70-90Å

- Quaternary ammonium group bonded copolymer is mixed anion exchange and reverse phase sorbent.
- Excellent extraction to purified acid, carboxy acid compounds, pKa between 2-8.

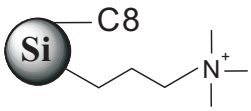
C8/SCX



Surface area:510m²/g
Particle size: 40-75μm
Pore size: 70Å

- Moderate retention, avoiding extremely strong adsorption of some compounds.
- Ideal for complicated samples such as blood and urine.

C8/SAX



Surface area:510m²/g
Particle size: 40-75μm
Pore size: 70Å

- Moderate retention, avoiding extremely strong adsorption of some compounds.
- Ideal for complicated samples such as blood and urine.

Carbon GCB/NH_2

Carb−GCB:
Surface area:100-250m²/g
Particle size:48-150μm

NH_2 :
Carbon content:4.5%
Surface area:200m²/g
Particle size: 40-75μm
Pore size: 100Å

- Ultrathin frit between two sorbent layers promising uniform flow.
- Capable of removing interferences as thoroughly as possible.

Carbon GCB/PSA

Carb−GCB:
Surface area:100-250m²/g
Particle size:48-150μm

NH_2 :
Carbon content:8%
Surface area:500m²/g
Particle size: 50-75μm
Pore size: 100Å

- Ultrathin frit between two sorbent layers promising uniform flow.
- Capable of removing interferences as thoroughly as possible.
- Higher capability than Carb-GCB/NH2.

Ordering Information

Cat. No.	Description	Mass	Volume	Package (pcs/pk)
SCC181001	C18	100mg	1mL	100
SCC182003		200mg	3mL	50
SCC185003		500mg	3mL	50
SCC185006		500mg	6mL	30
SCC1810006		1000mg	6mL	30
SCC18N1001	C18-ne	100mg	1mL	100
SCC18N2003		200mg	3mL	50
SCC18N5003		500mg	3mL	50
SCC18N5006		500mg	6mL	30
SCC18N10006		1000mg	6mL	30
SCC81001	C8	100mg	1mL	100
SCC82003		200mg	3mL	50
SCC85003		500mg	3mL	50
SCC85006		500mg	6mL	30
SCC810006		1000mg	6mL	30
SCCN1001	CN	100mg	1mL	100
SCCN5003		500mg	3mL	50
SCCN10006		1000mg	6mL	30
SCPSA1001	PSA	100mg	1mL	100
SCPSA5003		500mg	3mL	50
SCPSA5006		500mg	6mL	30
SCPSA10006		1000mg	6mL	30
SCNH21001	NH2	100mg	1mL	100
SCNH22003		200mg	3mL	50
SCNH25003		500mg	3mL	50
SCNH25006		500mg	6mL	30
SCNH210006		1000mg	6mL	30
SCSAX1001	SAX	100mg	1mL	100
SCSAX5003		500mg	3mL	50
SCSAX5006		500mg	6mL	30
SCSCX1001	SCX	100mg	1mL	100
SCSCX5003		500mg	3mL	50
SCSCX5006		500mg	6mL	30
SCSI1001	Silica	100mg	1mL	100
SCSI5003		500mg	3mL	50
SCSI10006		1000mg	6mL	30

SCFL1001	Florisil	100mg	1mL	100
SCFL5003		500mg	3mL	50
SCFL5006		500mg	6mL	30
SCFL10006		1000mg	6mL	30
SCALA1001	AL-A	100mg	1mL	100
SCALA5003		500mg	3mL	50
SCALA10006		1000mg	6mL	30
SCALB1001	AL-B	100mg	1mL	100
SCALB5003		500mg	3mL	50
SCALB10006		1000mg	6mL	30
SCALN1001	AL-N	100mg	1mL	100
SCALN5003		500mg	3mL	50
SCALN10006		1000mg	6mL	30
SCGCB2503	GCB	250mg	3mL	50
SCGCB5003		500mg	3mL	50
SCGCB5006		500mg	6mL	30
SCPLS0603	PLS	60mg	3mL	50
SCPLS1506		150mg	6mL	30
SCPLS2006		200mg	6mL	30
SCPLS5006		500mg	6mL	30
SCPLS5012		500mg	12mL	20
SCPCX0603	PCX	60mg	3mL	50
SCPCX1506		150mg	6mL	30
SCPCX2006		200mg	6mL	30
SCPCX5012		500mg	12mL	20
SCPCX10020		1000mg	20mL	20
SCPAX0603	PAX	60mg	3mL	50
SCPAX1506		150mg	6mL	30
SCPAX5012		500mg	12mL	20
SCPAX10020		1000mg	20mL	20

SPE Vacuum Manifold System

Introduction

SPE vacuum manifold system process multiple samples simultaneously, saving time and effort.These manifolds allow consistent extraction.No possibility of cross-contamination from one sample to another.

12 Position SPE Manifold System

SVM12S	
Glass chamber	Vacuum gauge
12 position cover with Luer Fittings	12 Retaining Clips
Gasket	4 Supports
12 Individual Flow Control Stopcocks	12 Luer Plugs
3 Posts	Valve Assemble
6 Shelves	Waster container
12 Guide needles	

SVM12	
Glass chamber	Vacuum gauge
12 Guide needles	12 Retaining Clips
Gasket	4 Supports
	12 Luer Plugs
3 Posts	Valve Assemble
6 Shelves	Waster container

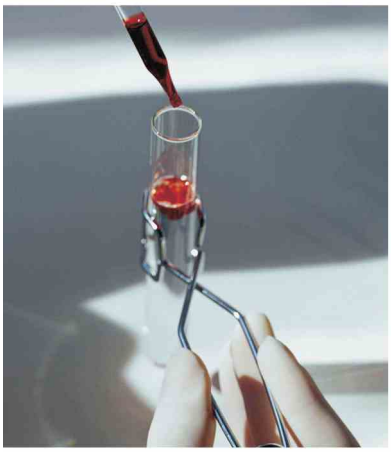
24 Position SPE Manifold System

SVM24S	
Glass chamber	Vacuum gauge
24 position cover with Luer Fittings	24 Retaining Clips
Gasket	4 Supports
24 Individual Flow Control Stopcocks	24 Luer Plugs
3 Posts	Valve Assemble
4 Shelves	24 Guide needles

SVM24	
Glass chamber	Vacuum gauge
24 position cover with Luer Fittings	24 Retaining Clips
Gasket	4 Supports
24 Guide needles	24 Luer Plugs
3 Posts	Valve Assemble
4 Shelves	

MICROLAB SCIENTIFIC

Plastic Labware



Pipette Tip

Introduction

- Made of PP.
- Volume: 10ml, 200ml, 1000ml.
- Smooth finish for minimum retention of collected samples.
- Available in bulk package or packed in box.
- Non Sterile/Gamma Sterile/EO Sterile.

Order Information

Item No.	Description	Volume(μl)	Type	With Filter	Sterile	Package
MPT1010GN	Pipette Tips	10	Fit for Gilson	No	No	1000pcs/pk,50pks/cs
MPT1200GN	Pipette Tips	200	Fit for Gilson	No	No	1000pcs/pk,50pks/cs
MPT11000GN	Pipette Tips	1000	Fit for Gilson	No	No	500pcs/pk,30pks/cs
MPT1010EN	Pipette Tips	10	Fit for Eppendorf	No	No	1000pcs/pk,50pks/cs
MPT1200EN	Pipette Tips	200	Fit for Eppendorf	No	No	1000pcs/pk,50pks/cs
MPT11000EN	Pipette Tips	1000	Fit for Eppendorf	No	No	500pcs/pk,30pks/cs
MPT0010GN	Pipette Tips	10	Fit for Gilson	Yes	No	1000pcs/pk,50pks/cs
MPT0200GN	Pipette Tips	200	Fit for Gilson	Yes	No	1000pcs/pk,50pks/cs
MPT01000GN	Pipette Tips	1000	Fit for Gilson	Yes	No	500pcs/pk,30pks/cs
MPT2010N	Pipette Tips	10	Fit for Gilson	No	No	96pcs/boxes,120boxes/cs
MPT2200N	Pipette Tips	200	Fit for Gilson	No	No	96pcs/boxes,100boxes/cs
MPT21000N	Pipette Tips	1000	Fit for Gilson	No	No	100pcs/box60boxes/cs
MPT3010N	Pipette Tips	10	Fit for Gilson	Yes	No	96pcs/boxes,120boxes/cs
MPT3200N	Pipette Tips	200	Fit for Gilson	Yes	No	96pcs/boxes,100boxes/cs
MPT31000N	Pipette Tips	1000	Fit for Gilson	Yes	No	100pcs/box60boxes/cs
MPT2010S	Pipette Tips	10	Fit for Gilson	No	Yes	96pcs/boxes,120boxes/cs
MPT2200S	Pipette Tips	200	Fit for Gilson	No	Yes	96pcs/boxes,100boxes/cs
MPT21000S	Pipette Tips	1000	Fit for Gilson	No	Yes	100pcs/box60boxes/cs
MPT3010S	Pipette Tips	10	Fit for Gilson	Yes	Yes	96pcs/boxes,120boxes/cs
MPT3200S	Pipette Tips	200	Fit for Gilson	Yes	Yes	96pcs/boxes,100boxes/cs
MPT31000S	Pipette Tips	1000	Fit for Gilson	Yes	Yes	100pcs/box60boxes/cs

Note: Gamma sterife is available.

Pasteur Pipette

Introduction

- Made of LDPE.
- Volume: 1ml, 3ml, 5ml, 10ml.
- Suitable for liquid transfer.

Order Information

Item No.	Description	Size	Material	Package
MPP001	Pasteur Pipette	1ml	LDPE	5000pcs/cs
MPP003	Pasteur Pipette	3ml	LDPE	5000pcs/cs
MPP005	Pasteur Pipette	5ml	LDPE	5000pcs/cs
MPP010	Pasteur Pipette	10ml	LDPE	5000pcs/cs

Serological Pipette

Introduction

- Made of high-grade polystyrene, excellent for clear observation and reduce liquid attachment on the pipet.
- Volume: 1ml, 2ml, 5ml, 10ml, 25ml,50ml. Graduations Inaccuracy<2% at full volume.
- Color-coded rings and package for easier identifying the correct size.
- All pipets are supplied with a filter plug to prevent overfill.
- Available with gamma sterile and non sterile package.
- Non-pyrogenic, Non-cytotoxic and Non-hemolytic.

Order Information

Item No.	Size(ml)	Graduation	Package	Gamma Sterile	PCS/CTN
MLSP001S	1	1/100ml	Individually pack,50pcs/bag,10bags/box	Yes	3000
MLSP002S	2	1/100ml	Individually pack,50pcs/bag,10bags/box	Yes	3000
MLSP005S	5	1/10ml	Individually pack,50pcs/bag,10bags/box	Yes	1500
MLSP010S	10	1/10ml	Individually pack,50pcs/bag,8bags/box	Yes	1200
MLSP025S	25	2/10ml	Individually pack,25pcs/bag,8bags/box	Yes	600
MLSP050S	50	5/10ml	Individually pack,25pcs/bag,4bags/box	Yes	300
MLSP001N	1	1/100ml	50pcs/bag,10bags/box	No	3000
MLSP002N	2	1/100ml	50pcs/bag,10bags/box	No	3000
MLSP005N	5	1/10ml	50pcs/bag,10bags/box	No	1500
MLSP010N	10	1/10ml	50pcs/bag,8bags/box	No	1200
MLSP025N	25	2/10ml	25pcs/bag,8bags/box	No	600
MLSP050N	50	5/10ml	25pcs/bag,4bags/box	No	300

Tubes

Centrifuge Tube

Introduction

- Made of high quality, crystal-clear polypropylene, chloroform-resistant,leak-proof.
- Widely used in chemical and life science. research, suitable for most brand of centrifuge.
- Available with almost all kinds of volume, with conical bottom and self-standing bottom, with white printing area for easy mark.
- Autoclavable at 121℃ and freezable to -80℃.

Order Information

Item No.	Volume(ml)	Type	Sterile	Package
CT000NB	0.2	Conical	No	1000pcs/pk,70pks/cs
CT000NA	0.5	Conical	No	1000pcs/pk,30pks/cs
CT001NA	1.5	Conical	No	500pcs/pk,20pks/cs
CT002NA	2	Conical	No	500pcs/pk,20pks/cs
CT005NA	5	Round	No	500pcs/pk,20pks/cs
CT007NA	7	Round	No	300pcs/pk,20pks/cs
CT010NA	10	Round	No	100pcs/pk,30pks/cs
CT010NB	10	Round	No	100pcs/pk,30pks/cs
CT015NA	15	Conical	No	100pcs/pk,5pks/cs
CT015SA	15	Conical	Yes	100pcs/pk,5pks/cs
CT050NA	50	Conical	No	50pcs/pk,10pks/cs
CT050SA	50	Conical	Yes	50pcs/pk,10pks/cs
CT150NA	50	Self-standing	No	50pcs/pk,10pks/cs
CT150SA	50	Self-standing	Yes	50pcs/pk,10pks/cs

Tubes

Test Tube

Introduction

- Made of PP and PS.
- Available with round bottom and conical bottom.

Order Information

Item No.	Description	Size(mm)	Material	Package
TTR1260S	Round Bottom	12*60	PS	6000pcs/cs
TTR1260P	Round Bottom	12*60	PP	6000pcs/cs
TTR1275S	Round Bottom	12*75	PS	5000pcs/cs
TTR1275P	Round Bottom	12*75	PP	5000pcs/cs
TTR1375S	Round Bottom	13*75	PS	5000pcs/cs
TTR1375P	Round Bottom	13*75	PP	5000pcs/cs
TTR1378S	Round Bottom	13*78	PS	5000pcs/cs
TTR1378P	Round Bottom	13*78	PP	5000pcs/cs
TTR13100S	Round Bottom	13*100	PS	4000pcs/cs
TTR13100P	Round Bottom	13*100	PP	4000pcs/cs
TTR15100S	Round Bottom	15*100	PS	3000pcs/cs
TTR15100P	Round Bottom	15*100	PP	3000pcs/cs
TTR16100S	Round Bottom	16*100	PS	2500pcs/cs
TTR16100P	Round Bottom	16*100	PP	2500pcs/cs
TTC16102S	Conical Bottom	16*102	PS	2500pcs/cs
TTC16102P	Conical Bottom	16*102	PP	2500pcs/cs
CTT1275S	Cell Test Tube	12*75	PS	5000pcs/cs
CTT15100S	Cell Test Tube	15*100	PS	5000pcs/cs
TTR22120S	Round Bottom	22*120	PS	1200pcs/cs
TTR22153S	Round Bottom	20*153	PS	1200pcs/cs
TS12	Tube Stopper	ϕ 12	LDPE	30000pcs/cs
TS13	Tube Stopper	ϕ 13	LDPE	30000pcs/cs
TS15	Tube Stopper	ϕ 15	LDPE	15000pcs/cs
TS16	Tube Stopper	ϕ 16	LDPE	15000pcs/cs

Plate

Culture Plate

Introduction

- Made of high -grade medical PS.
- Anti-slip area on base sides for easier gripping.
- Stackable.

Order Information

Item No.	Description	Size	Material	Package
LWCP06	Culture Plate	6 well	PS	200pcs/cs
LWCP12	Culture Plate	12 well	PS	200pcs/cs
LWCP24	Culture Plate	24 well	PS	200pcs/cs
LWCP48	Culture Plate	48 well	PS	200pcs/cs
LWCP96F	Culture Plate	96 well,flat bottom	PS	200pcs/cs
LWCP96U	Culture Plate	96 well, U bottom	PS	200pcs/cs
LWCP96V	Culture Plate	96 well, V bottom	PS	200pcs/cs

Elisa Plate

Introduction

- Made of high-grade medical PS.
- 96 well plate.
- Flat bottom, suitable for Elisa.
- Detachable, and can be divided into strips (8-stripe or 12-stripe) and outer frame.

Order Information

Item No.	Description	Size	Material	Package
LWEP08	Elisa Plate	96 well (detachable 8 strips)	PS	200pcs/cs
LWEP12	Elisa Plate	96 well (detachable 12 strips)	PS	200pcs/cs

Deepwell Plate

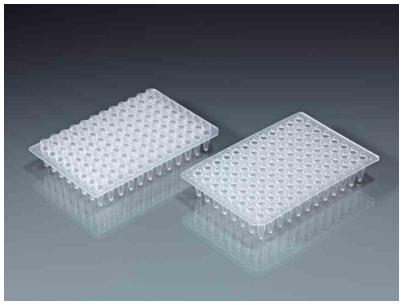
Introduction

- Made of high quality PP
- Volume: 1ml*96 well, 2ml*96 well
- Autoclavable at 121℃

Order Information

Item No.	Description	Size	Material	Package
LWDP01	Deep well plate	1ml*96 well	PP	200pcs/cs
LWDP02	Deep well plate	2ml*96 well	PP	200pcs/cs

PCR Plate



Introduction

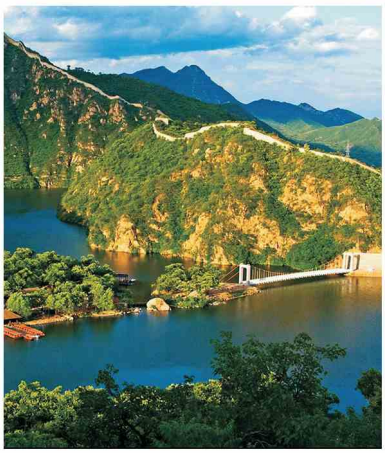
- Made of high quality PP.
- Temperature range: stable from -20℃ to 100℃.
- Fit for most brands and models of PCR instrument.

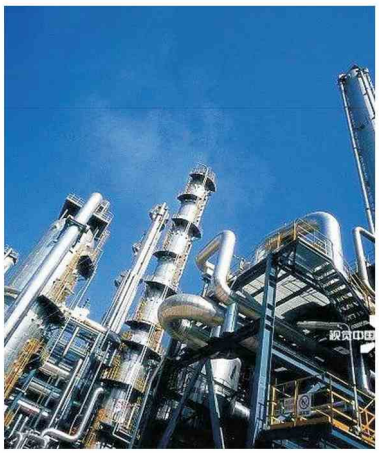
Order Information

Item No.	Description	Size	Material	Package
LWPCR96F	PCR Plate	96 well	PP	200pcs/cs
LWPCR96B	PCR Plate	PCR Plate, 96well/bulge	PP	200pcs/cs
LWPCR96S	PCR Plate	PCR Plate, 96well/ skirted	PP	200pcs/cs
LWPCR384	PCR Plate	PCR Plate, 384well	PP	200pcs/cs

MICROLAB SCIENTIFIC

Industry Filtration





Capsule Filter

Capsule Filters

Introduction

Capsule Filters are ready-to-use units for critical applications and small volume flows of gases and liquids. All filter units consist of a durable polypropylene housing and are available in various filter media and pore sizes. The housing units are thermal welded and all capsule filters have many connection options. They are manufactured in a clean room environment and are processes in double sealed packaging to avoid any possible contamination.

Roduct Characteristics

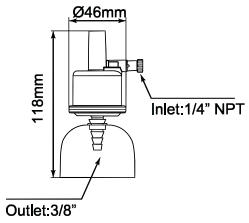
- Many kinds of filter media and removal rating.
- Made in the clean environment and always keep clean situation.
- Absolutly bio-safety and non-toxic.
- Have many kinds of capsule size.Accroding to flow rate and flow speed to choose the correct filter,because different capsule length have his own effective filtration area.

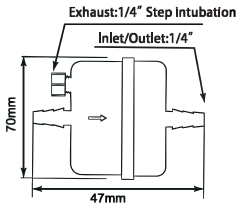
Product Specification

Material Of Constructions	[Media] : PP,PES,PTFE,Nylon66,GF [Support] : PP [Housing] : PP [Sealing] : Thermally Welded
Performance	[Removal Rating] : PP : 0.1μm,0.22μm,0.45μm,1μm,3μm,5μm,10μm,20μm, 30μm,50μm PES : 0.1μm,0.22μm,0.45μm,0.65μm,0.8μm,1.2μm PTFE(Liquid) : 0.1μm,0. 22μm,0.45μm PTFE(Gas) : 0.01μm,0.02μm Nylon6 : 0.1μm,0.22μm,0.45μm,0. 65μm,1μm GF : 0.45μm,1μm,3μm,5μm,10μm,20μm

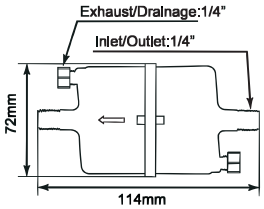
Ordering Information

Model	Media
CP 401	PP=polypropylene PES=Polyetjersulfone PTFE=Polytetrafluoroethylene N6=Nylon 6 GF=Glass Fiber

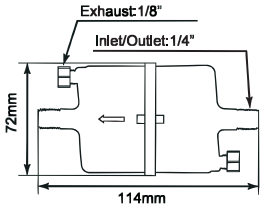




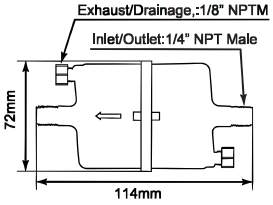
CP 701



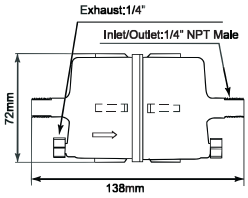
CP 702



CP 703



CP 704



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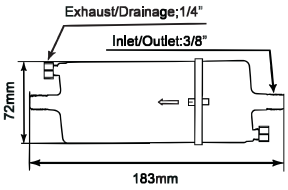
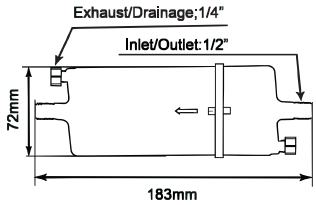
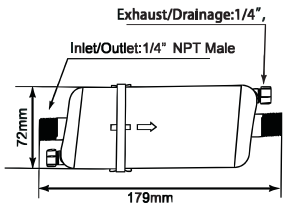


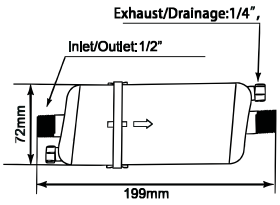
CP 706



CP 707



CP 708



CP 709

CP701PP01

Removal Rating					
PP	PES	PTFE(Liquid)	PTFE(Gas)	Nylon66	Glass Fiber
01=0.1μm 022=0.22μm 045=0.45μm 1=1μm 3=3μm 5=5μm 10=10μm	01=0.1μm 022=0.22μm 045=0.45μm 065=0.65μm 08=0.8μm 1.2=1.2μm	01=0.1μm 022=0.22μm 045=0.45μm	001=0.01μm 002=0.02μm	01=0.1μm 02=0.2μm 045=0.45μm 065=0.65μm 1=1μm	045=0.45μm 1=1μm 3=3μm 5=5μm 10=10μm 20=20μm

Pleated Cartridge Filter

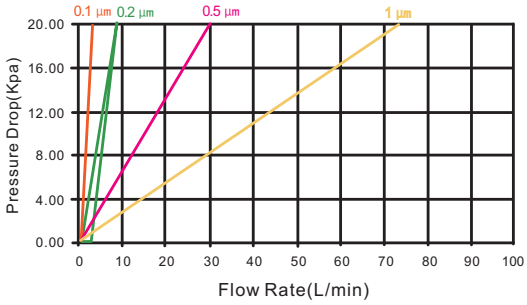
Nylon 66

Introduction

Nylon66 Series filter cartridge is constructed of nylon6 media and nonwoven support materials.The adaptors are thermally welded without the use of glues or adhesive to prevent any possibility of pollution.The filters are produced in clean room and 100% integrity tested and flushed with ultrapure water.

Application:

- Coatings.
- Plating.
- Machinery & Equipment.



Product specification

Dimension	[OD]: Φ69mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: Nylon 66 [Support]: PP [Cage/Core/End cap]: PP [Sealing]: Silicone, EPDM, NBR, Viton, Teflon, E-FKM
Performance	[Max. Operating temperature]: 80℃ [Max. Operating DP]: 4 bar@ 21℃ 2.4 bar@ 80℃

Ordering Information

CPNY01N10SP

Removal Rating	End cap type	Length	Seal Material	Core
01=0. 1μm 022=0. 22μm 045=0. 45μm 1=1μm	F=DOE H=213/Flat J=222/Flat/ss K=222/Fin/ss M=222/Flat P=222/Fin Q=226/Fin T=226/Flat R=226/Flat/ss V=226/Flat/ss	10=10" 20=20" 30=30" 40=40"	S=Silicone E=EPDM B=NBR V=Viton T=Teflon F=E-FKM	P=PP core S=SS core

Industrial Filtration

Pleated Cartridge Filter

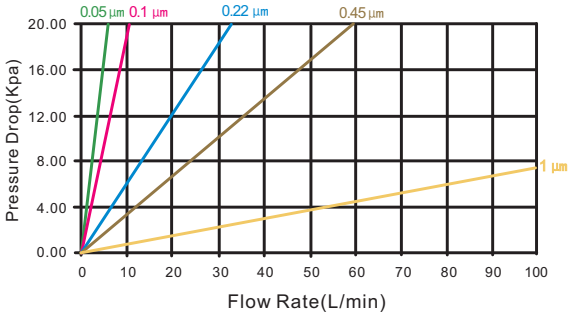
PTFE

Introduction

Hydrophobic PTFE Series Filter Cartridge is constructed of hydrophobic PTFE membrane which has excellent chemical compatibility and corrosion resistance.This filter cartridge is suitable for the filtration to liquids and gases with strongly aggressive and oxidative.

Application:

- Coatings.
- Plating.
- Machinery & Equipment.



Product specification

Dimension	[OD]: Φ69mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: Hydrophobic PTFE Membrane [Support]: PP [Cage/Core/End cap]: PP [Sealing]: Silicone, EPDM, NBR, Viton, Teflon, E-FKM
Performance	[Max. Operating temperature]: 80℃ [Max. Operating DP]: 4 bar@ 21℃ 2.4 bar@ 80℃

Ordering Information

CPPTB01N10SP

Removal Rating	End cap type	Length	Seal Material	Core
005=0.05µm 01=0.1µm 022=0.22µm 045=0.45µm 1=1µm	F=DOE H=213/Flat J=222/Flat/ss K=222/Fin/ss M=222/Flat P=222/Fin Q=226/Fin T=226/Flat R=226/Flat/ss V=226/Flat/ss	10=10" 20=20" 30=30" 40=40"	S=Silicone E=EPDM B=NBR V=Viton T=Teflon F=E-FKM	P=PP core S=SS core

Industrial Filtration

Pleated Cartridge Filter

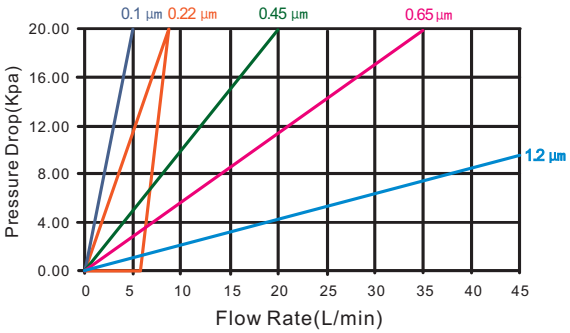
Hydrophilic PVDF

Introduction

Hydrophilic PVDF Series Filter Cartridge is constructed of hydrophilic PVDF microporous membrane with excellent resistance to high temperature and corrosion resistance,no fibre shedding.Filter media has good hydrophilicity,no need to do pre wetting treatment before filting water solutions.

Application:

- Oil & Chemical.



Product specification

Dimension	[OD]: Φ69mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: Hydrophilic PVDF Membrane [Support]: PP [Cage/Core/End cap]: PP [Sealing]: Silicone, EPDM, NBR, Viton, Teflon, E-FKM
Performance	[Max. Operating temperature]: 80℃ [Max. Operating DP]: 4 bar@ 21℃ 2.4 bar@ 80℃

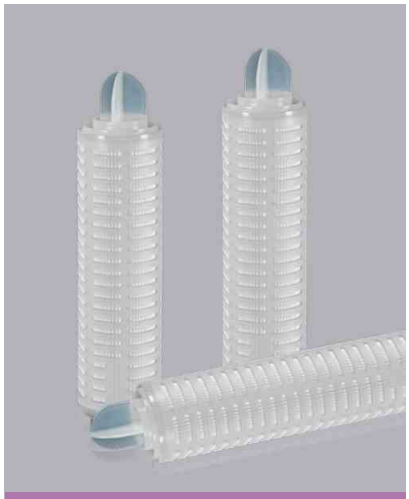
Ordering Information

CPPVL01F10SP

Removal Rating	End cap type	Length	Seal Material	Core
01=0.1μm 022=0.22μm 045=0.45μm 065=0.65μm 08=0.8μm 12=1.2μm	F=DOE H=213/Flat J=222/Flat/ss K=222/Fin/ss M=222/Flat P=222/Fin Q=226/Fin T=226/Flat R=226/Flat/ss V=226/Flat/ss	10=10" 20=20" 30=30" 40=40"	S=Silicone E=EPDM B=NBR V=Viton T=Teflon F=E-FKM	P=PP core S=SS core

Industrial Filtration

Pleated Cartridge Filter



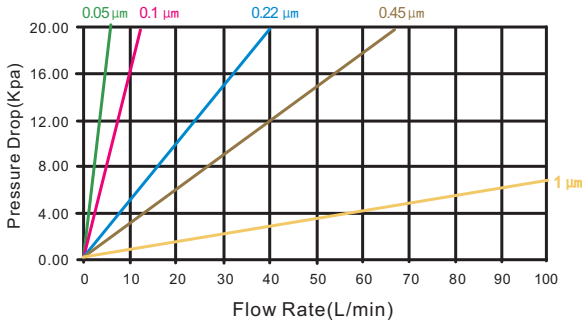
Hydrophilic PTFE

Introduction

Hydrophilic PTFE Series filter cartridge is constructed of hydrophilic PTFE membrane which has excellent chemical compatibility and corrosion resistance.The membrane is hydrophilic which can filter the liquid directly without pre-wetting to save the operation time.

Application:

- Plating.
- Machinery & Equipment.



Product specification

Dimension	[OD]: Φ69mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: Hydrophilic PTFE membrane [Support]: PP [Cage/Core/End cap]: PP [Sealing]: Silicone, EPDM, NBR, Viton, Teflon, E-FKM
Performance	[Max. Operating temperature]: 80℃ [Max. Operating DP]: 4 bar@ 21℃ 2.4 bar@ 80℃

Ordering Information

CPPTL01N10SP

Removal Rating	End cap type	Length	Seal Material	Core
005=0.05µm 01=0.1µm 022=0.22µm 045=0.45µm 1.2=1.2µm	F=DOE H=213/Flat J=222/Flat/ss K=222/Fin/ss M=222/Flat P=222/Fin Q=226/Fin T=226/Flat R=226/Flat/ss V=226/Flat/ss	05=5" 10=10" 20=20" 30=30" 40=40"	S=Silicone E=EPDM V=Viton	P=PP core S=SS core

Industrial Filtration

Pleated Cartridge Filter

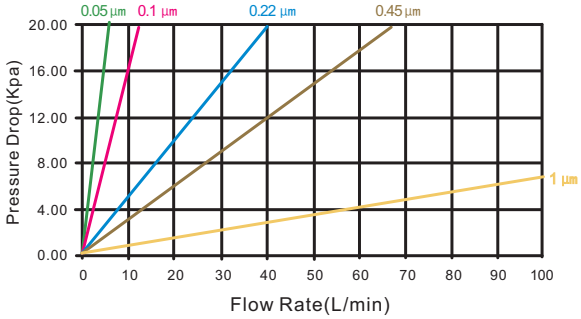
PFA

Introduction

PFA Series filter cartridges are constructed of PTFE absolute-rated membrane,PTFE support netting, and ultra-pure PFA hardware.This presents a filter cartridge with excellent chemical compatibility,corrosion resistance, and low extractions to ensure high efficiency filtration and long service life with chemicals.

Application:

- Machinery & Equipment.



Product specification

Dimension	[OD]: Φ69mm [ID]: 28mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: Hydrophobic/ Hydrophilic PTFE membrane [Support Netting]: PTFE [Cage/Core/End cap]: PFA [Sealing]: Viton, Teflon, E-FKM
Performance	[Max. Operating temperature]: 170℃ [Max. Operating DP]: 4 bar@ 21℃

Ordering Information

CPPFA01M10V

Removal Rating	End cap type	Length	Seal Material
01=0.1µm 022=0.22µm 045=0.45µm 1=1µm	M=222/Flat	10=10" 20=20" 30=30" 40=40"	V=Viton T=Teflon F=E-FKM

Industrial Filtration

Pleated Cartridge Filter

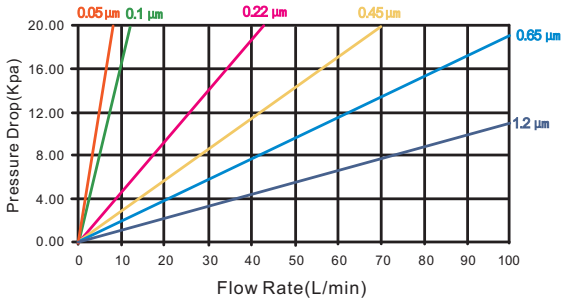
PES

Introduction

PES Series cartridge filter is constructed of imported hydrophillic asymmetric PES membrane and imported non-woven fabrics and silk netting as support and then pleated.The cage,PP core and end cap are thermally welded with media without using any glue.All cartridges are manufactured and assembled in a clean room environment.100% of the cartridges are integrity tested and flushed with EDI pure water.It is suitable for filtering weak acid/alkali based liquid and ultra pure water.

Application:

- Mining.
- Machinery & Equipment.
- Industrial Water Treatment.



Product specification

Dimension	[OD]: Φ69mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: PES [Support]: PP [Cage/Core/End cap]: PP [Sealing]: Silicone， EPDM, NBR, Viton, Teflon, E-FKM
Performance	[Max. Operating temperature]: 80℃ [Max. Operating DP]: 4 bar@ 21℃ 2.4 bar@ 80℃

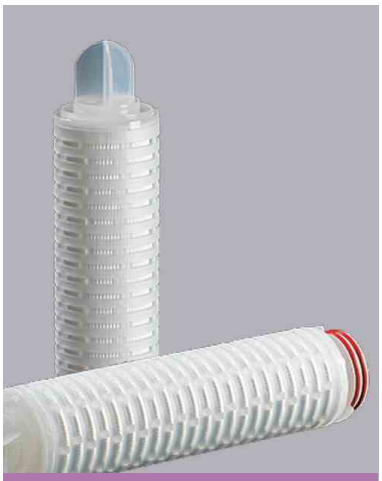
Ordering Information

CPPES01F10SP

Removal Rating	End cap type	Length	Seal Material	Core
005=0.05μm 01=0.1μm 022=0.22μm 045=0.45μm 065=0.65μm 12=1.2μm	F=DOE H=213/Flat J=222/Flat/ss K=222/Fin/ss M=222/Flat P=222/Fin Q=226/Fin T=226/Flat R=226/Flat/ss V=226/Flat/ss	10=10" 20=20" 30=30" 40=40"	S=Silicone E=EPDM B=NBR V=Viton T=Teflon F=E-FKM	P=PP core S=SS core

Industrial Filtration

Pleated Cartridge Filter



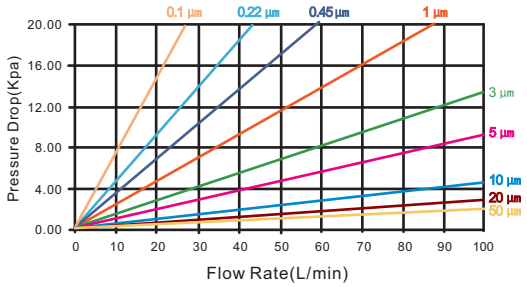
PP

Introduction

PP pleated filter cartridge is constructed of high performance polypropylene filter media that got technological breakthrough type sub-micro level.The pores of the material are uniformly distributed.The construction is designed scientifically which makes the filter cartridge got high flow rate. This allows users can filter the particles in liquid quickly and efficiently and save the cost.

Application:

- Coatings.
- Ink.
- Oil & Chemical.
- Plating.
- Machinery & Equipment.
- Industrial Water Treatment.



Product specification

Dimension	[OD]: Φ69mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: PP [Support]: PP [Cage/Core/End cap]: PP [Sealing]: Silicone， EPDM, NBR, Viton, Teflon, E-FKM
Performance	[Max. Operating temperature]: 80℃ [Max. Operating DP]: 4 bar@ 21℃ 2.4 bar@ 80℃

Ordering Information

CPPP01F10SP

Removal Rating	End cap type	Length	Seal Material	Core
01=0.1μm 022=0.22μm 045=0.45μm 1=1μm 3=3μm 5=5μm 10=10μm 20=20μm 50=50μm	F=DOE H=213/Flat J=222/Flat/ss K=222/Fin/ss M222/Flat P=222/Fin Q=226/Fin T=226/Flat R=226/Flat/ss V=226/Flat/ss	10=10" 20=20" 30=30" 40=40"	S=Silicone E=EPDM B=NBR V=Viton T=Teflon F=E-FKM	P=PP core S=SS core

Industrial Filtration

Pleated Cartridge Filter

Big

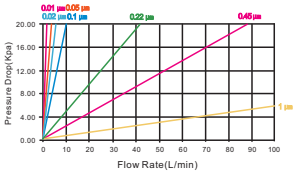
Introduction

Big pleated filter cartridge is designed for the filtration of manufacture wetting process in the flat panel display. It has larger filtration area and higher flow rate.83 series can meet the 5-6 grade line which has requirement of 120 L/Min flow rate,131 series can meet the 7-10 grade line which has requirement of 250 L/Min flow rate.

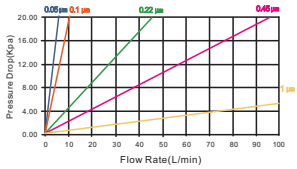
Product specification

Dimension	[OD] : Φ 83mm, 131mm [Length] : 10″
Material Of Constructions	[Media] : PP, PES, Hydrophobic PTFE, Hydrophilic PTFE [Support] : PP [Cage/Core/End cap] : PP [Sealing] : EPDM, Viton, E-FKM
Performance	[Max. Operating temperature] : 80℃ [Max. Operating DP] : 4 bar@ 21℃ 2.4 bar@ 80℃

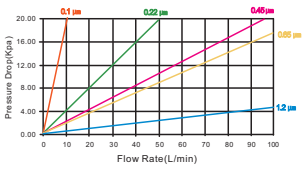
Φ83mm



Hydrophobic PTFE

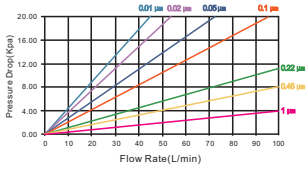


Hydrophilic PTFE

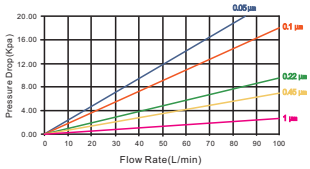


PES

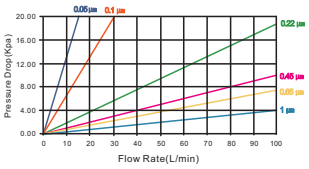
Φ131mm



Hydrophobic PTFE



Hydrophilic PTFE



PES

Ordering Information

CP8G01M10E
CP13G01M10E

Size	Media	Removal Rating			
		PES	PP	Hydrophobic PTFE	Hydrophilic PTFE
8	G=PP	005=0.05μm	01=0.1μm	001=0.01μm	005=0.05μm
13	A=PES	01=0.1μm	022=0.22μm	002=0.02μm	01=0.1μm
	T=Hydrophobic PTFE	022=0.22μm	045=0.45μm	005=0.05μm	022=0.22μm
	T=Hydropholic PTFE	045=0.45μm	1=1μm	01=0.1μm	045=0.45μm
		065=0.65μm	3=3μm	022=0.22μm	1=1μm
		12=1.2μm	5=5μm	045=0.45μm	
			10=10μm	1=1μm	
			20=20μm		
			50=50μm		

End cap type	Length	Seal Material
M=222/Flat T=226/Flat	10=10"	E=EPDM V=Viton F=E-FKM

Industrial Filtration

Meltblow Cartridge Filter

Melt Blown

Introduction

PP Melt Blown Filter Cartridges is Microlab standard series of melt blown filter cartridges. It features fused and intertwined polypropylene fiber without the use of chemicals or glue. The fibers are bonded randomly to form 3-D microporosity in three zones. There are fine fibers for efficient particle removal and coarse fibers for strength of the structure. Changing fiber size and density creates the needed filtration rating. With lower density on the outer surface and tighter pores when moving to the inside, it can remove contaminant effectively, such as suspended substances, particulates and rust, providing efficient filtration and long service life.

Roduct Characteristics

- Three-zone structure cartridge offers high dirt holding capacity and longer service life.
- Formed by thermal bond without using binders or adhesives.
- 100% pure polypropylene will not contaminate the treated liquid.
- Wide chemical compatibility.
- All common adaptors are available.
- FDA compliant material.

Product specification

Dimension	[OD]: Φ69mm,115mm [ID]: Φ 28mm, 30mm [Length]: 10″,20″,30″,40″,50″, 60″
Material Of Constructions	[Media]: Polypropylene(PP) [End cap]: Polypropylene(PP) [Gasket]: Silicone, EPDM, NBR, Viton [Core]: Polypropylene(PP)
Performance	[Max. Operating temperature]: 65℃ [Max. Operating DP]: 2.0Bar@21℃

Ordering Information

CMPPO1F10SN
CMPPB1F10SN

Outer Diameter	Removal Rating	End Cap Type	Length	Seal Material	Core
O=63mm B=115mm	1=1μm 3=3μm 5=5μm 10=0μm 20=20μm 50=50μm 75=75μm 100=100μm 150=150μm	F=DOE M=222/Flat P=222/Fin T=226/Flat Q=226/Fin	10=10"(254mm) 20 =20"(508mm) 30=30"(762mm) 40=40"(1016mm) 50=50"(1270mm) 60=60"(1524mm)	S=Silicone E=EPDM B=NBR V=Viton	N=No core P=PP core

Industrial Filtration

String Wound Cartridge Filter

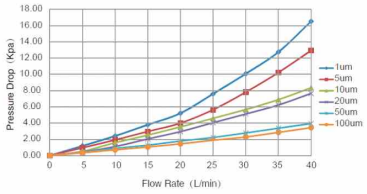
String Wound

Introduction

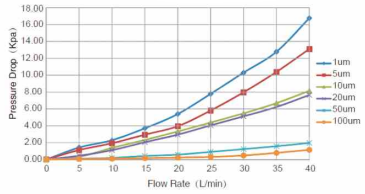
String wound cartridges are manufactured with structured open outer layers and tight inner layers to offer true depth filtration for high dirt holding capacity and extremely low media migration. The main advantage of the string wound filter cartridge is its exceptionally high structural strength, therefore, they can withstand higher PSID and severe operating conditions.

Solutions

- Oil & Chemical.
- Plating.
- Mining.
- Machinery & Equipment.
- Industrial Water Treatment.



PP String Wound Filter Pressure Drop vs.Flow Rate@20°C



Cotton String Wound Filter Pressure Drop vs.Flow Rate@20°C

Product specification

Dimension	[OD]: Φ69mm,115mm [ID]: Φ 28mm, 30mm [Length]: 10″, 20″, 30″, 40″
Material Of Constructions	[Media]: Polypropylene， Bleached cotton， Glass Fiber [Core]: PP,Stainless Steel
Performance	[Max. Operating temperature]: Polypropylene(PP): 80℃ Bleached cotton: 120℃ Glass Fiber: 200℃ [Max. Operating DP]: 2.0bar@25℃

Ordering Information

CWO1A10FS
CWB1B10FS

Outer Diameter	Material	Removal Rating	End Cap Type	Length	Seal Material
O=63mm B=115mm	A=PP yarn and PP core B=Cotton yarn and SS core C=Cotton yarn and PP core D=Glass fiber and SS core	1=1μm 5=5μm 10=10μm 20=20μm 50=50μm 75=75μm 100=100μm	F=DOE M=22/Flat P=222/Fin T=226/Flat Q=226/Fin	10=10"(254mm) 20 =20"(508mm) 30=30"(762mm) 40=40"(1016mm)	S=Silicone E=EPDM B=NBR V=Viton **Core** P=PP core S=SS core

Industrial Filtration

Chemical Compatibility Table

R: Resistant ***LR: Limited Resistant***
NR: Not Resistant ***"-" : No data avaiable***

Classification	Name	Nylon66	PVDF	PTFE	PES	PP	MCE	Silicone	Viton/TEV	EPDM
Acids	Acetic Acid	NR	R	R	NR	R	LR	LR	NR	R
	Hydrochloric Acid (conc.)	NR	R	R	R	R	NR	NR	NR	NR
	Hydrochloric Acid (6N)	NR	R	R	R	R	NR	NR	R	NR
	Nitric Acid (conc.)	NR	R	R	-	R	NR	NR	R	NR
	Nitric Acid (6N)	NR	R	R	-	R	NR	LR	R	NR
	Phosphoric Acid (conc.)	NR	R	R	-	R	NR	NR	R	R
	Sulfuric Acid (conc.)	NR	R	R	NR	R	NR	NR	R	NR
	Hydrofluoric Acid (6N)	NR	R	R	-	NR	NR	NR	-	NR
Bases	Ammonium Hydroxide (1N)	R	LR	R	R	R	R	R	R	R
	Ammonium Hydroxide (3N)	R	NR	R	R	R	NR	R	LR	LR
	Potassium Hydroxide (3N)	R	LR	R	R	R	NR	LR	R	R
	Sodium Hydroxide (3N)	R	LR	R	R	R	NR	R	R	R
	Sodium Hydroxide (6N)	R	NR	R	R	R	NR	R	R	R
Alcohols	Amyl Alcohol	R	R	R	R	R	NR	NR	R	R
	Benzyl Alcohol (100%)	R	R	R	R	R	NR	LR	R	R
	Butanol	R	R	R	R	R	R	R	LR	R
	Isopropanol	R	R	R	R	R	-	R	R	R
	Methanol	LR	R	R	R	R	LR	R	NR	R
Ketones	Acetone	R	LR	R	NR	R	NR	NR	NR	R
	Cyclohexanone	-	LR	R	NR	R	NR	NR	NR	NR
	Methyl Ethyl Ketone	LR	LR	R	-	R	-	NR	NR	R
	Methyl Isobutyl Ketone	LR	LR	R	NR	R	-	NR	NR	R
Oils	Cottonseed	R	R	R	-	R	-		R	R
	Lubricant	R	R	R	NR	R	-	R	R	R
	Peanut	R	R	R	-	R	-	R	R	R
	Sesame	R	R	R	R	R	-	R	R	R
Aromatic Hydrocarbons	Benzene	LR	LR	R	LR	NR	R	NR	R	NR
	Toluene	NR	LR	R	NR	NR	R	NR	R	NR
	Xylene	LR	LR	R	NR	NR	R	NR	R	NR

Index

Classification	Name	Nylon66	PVDF	PTFE	PES	PP	MCE	Silicone	Viton/TEV	EPDM
Halogenated Hydrocarbons	Carbon Tetrachloride	LR	LR	R	LR	LR	NR	NR	R	NR
	Chloroform	LR	LR	R	NR	LR	NR	NR	R	NR
	Ethylene Dichloride	LR	LR	R	NR	LR	R	NR	LR	NR
	Freon TF	R	R	R	R	LR	R	NR	R	NR
	Freon TMC	LR	LR	R	NR	LR	R	NR	LR	NR
	Methylene Dichloride	NR	LR	R	NR	LR	NR	NR	LR	NR
	Perchloroethylene	-	LR	R	LR	LR	R	NR	R	NR
	Trichloroethylene	LR	NR	R	LR	LR	R	NR	R	NR
Glycols	Ethylene Glycol	R	R	R	LR	R	-	R	R	R
	Glycerol	R	R	R	LR	R	R	R	R	R
	Propylene Glycol	R	R	R	LR	R		R	R	R
Ethers	Ethyl Ether	NR	R	R	R	LR	NR	LR	NR	NR
	Isopropyl Ether	-	R	R	-	R	NR	NR	NR	NR
	Dioxane	R	R	R	-	R	NR	NR	NR	NR
	Tetrahydrofuran	NR	LR	R	NR	LR	NR	NR	NR	NR
Esters	Amyl Acetate	LR	R	R	-	R	NR	NR	NR	R
	Butyl Acetate	LR	R	R	-	LR	NR	NR	R	R
	Cellosolve Acetate	-	R	R	R	R	NR	NR	NR	R
	Ethyl Acetate	LR	R	R	LR	LR	NR	R	R	R
	Methyl Acetate	LR	R	R	NR	R	NR	-	R	R
	Isopropyl Acetate	-	R	R	R	R	NR	LR	NR	R
Miscellaneous	Aniline	LR	R	R	NR	LR	-	NR	R	R
	Dimethyl Formamide	R	NR	R	NR	R	-	R	NR	R
	Formaldehyde (37%)	R	R	R	R	R	-	R	NR	R
	Gasoline	LR	LR	LR	R	LR	R	NR	R	R
	Hexane (dry)	-	LR	LR	LR	LR	R	NR	R	NR
	Kerosene	-	R	R	R	R	-	NR	R	NR
	Phenol	R	R	R	NR	R	R	NR	R	NR
	Pyridine	LR	R	R	NR	LR	NR	NR	NR	R
	Turpentine	-	R	R	R	LR	-	NR	R	NR
	Water	R	R	R	R	R	R	LR	R	R
	Acetonitrile	LR	R	R	R	LR	NR	-	NR	R
	Nickel Sulfate Solution	R	R	R	-	R	-	R	-	R

Index