

> Membrane selection guide

Cellulose Acetate - CA:
Ideal hydrophilic membrane for the filtration of aqueous samples, with low solvent resistance.
Less chemical resistance compare to RC membranes.
A Glass pre-filter membrane is used for tissue culture media filtration, biological sample filtration, as clarification and sterilization of aqueous samples.
Very low protein binding (binding < PVDF, PS), the Glass pre-filter increases filtrate volume yield by 3.

Regenerated Cellulose - RC:
Hydrophilic membrane that has the same properties as cellulose acetate but stable with most HPLC solvents.
This membrane is used for HPLC solvents, degassing, and filtration and is compatible with aqueous samples in a pH range from 2 to 12.
With a non-specific low protein binding, this membrane is chosen for protein filtration when maximum yield of recovery is needed.

Nylon - polyamide 6-6:
Commonly used for HPLC samples filtration prior to injection, with good solvent resistance. Having hydrophilic properties, it gives good results with aqueous samples. Should not be used when maximum protein recovery is required.

PVDF - polyvinylidene difluoride:
Hydrophilic membrane with a good solvent resistance. Ideal for filtration of HPLC mobile phase solvents and for most of biological samples.
PVDF membrane is also considered as having the lowest protein binding.

PTFE - polytetrafluoroethylene:
Hydrophobic membrane chemically resistant to solvents, acids and bases.
This membrane is ideal for filtration of chromatography solvents, with no extractable due to the PTFE membrane.

PP - polypropylene:
High resistance, may be used with virtually all solvents, acids and bases.

Glass Fiber - GF:
Commonly used as a pre-filter for most of filtrations devices.
It increase by 3 times the filtration capacity.
Typically used for crude samples and used for the cleaning and purification of DNA.

> Solvent compatibility chart

	CA	RC	Nylon	PVDF	PTFE	PP
Acids						
Acetic, Glacial	NC	C	LC	C	C	C
Acetic, 25 %	NC	C	C	C	C	C
Hydrochloric, Concentrated	NC	NC	NC	C	C	C
Hydrochloric, 25 %	NC	NC	NC	C	C	C
Sulfuric, Concentrated	NC	NC	NC	NC	C	C
Sulfuric, 25 %	NC	LC	NC	C	C	C
Nitric, Concentrated	NC	NC	NC	C	C	C
Nitric, 25 %	NC	NC	NC	C	C	C
Phosphoric, 25 %	NC	LC	NC	ND	C	C
Formic, 25 %	NC	NC	NC	ND	C	C
Trichloroacetic, 10 %	NC	C	NC	ND	C	C
Bases						
Ammonium Hydroxide, 25 %	LC	LC	C	LC	C	C
Sodium Hydroxide, 3 Normal	NC	LC	C	C	C	C
Alcohols						
Methanol, 98 %	LC	C	C	C	C	C
Ethanol, 98 %	LC	C	C	C	C	C
Ethanol, 70 %	LC	C	C	C	C	C
Isopropanol, n-Propanol	LC	C	C	C	C	C
Amyl alcohol, Butanol	LC	C	C	C	C	C
Benzyl Alcohol	LC	C	C	C	C	C
Ethylene glycol	LC	C	C	C	C	C
Propylene glycol	LC	C	C	C	C	C
Glycerol	LC	C	C	C	C	C
Hydrocarbons						
Hexane, Xylene	LC	C	C	C	C	NC
Toluene, benzene	C	C	C	C	C	NC
Kerosene, Gasoline	LC	C	C	C	C	LC
Tetralin, Decalin	C	C	ND	C	C	ND
Halogenated Hydrocarbons						
Methylene Chloride	NC	C	LC	C	C	LC
Chloroform	NC	C	C	C	C	LC
Trichloroethylene	LC	C	C	C	C	LC
Monochlorobenzene, Freon	LC	C	C	C	C	LC
Carbon Tetrachloride	LC	C	C	C	C	LC
Ketones						
Acetone, Cyclohexanone	NC	C	C	C	C	C
Methyl Ethyl Ketone	NC	C	C	LC	C	LC
Isopropylacetone	NC	C	C	NC	C	ND
Methyl Isobutyl Ketone	NC	C	ND	LC	C	LC
Esters						
Ethyl Acetate, & Methyl Acetate	LC	C	C	C	C	LC
Amyl, Propyl & Butyl Acetate	LC	C	C	ND	C	LC
Propyl Acetate	LC	C	C	ND	C	LC
Propylene Glycol Acetate	LC	C	C	ND	C	LC
2-Ethoxyethyl Acetate	LC	C	ND	ND	C	ND
Methyl Cellosolve Acetate	LC	C	ND	ND	C	ND
Benzyl Benzoate	LC	C	C	ND	C	ND
Isopropyl Myristate	LC	C	C	ND	C	ND
Tricresyl Phosphate	LC	C	ND	ND	C	ND
Ethers Oxides						
Ethyl Ether	LC	C	C	C	C	C
Dioxane & Tetrahydrofuran	NC	C	C	LC	C	ND
Triethanolamine	LC	C	C	LC	C	ND
Dimethylsulfoxide (DMSO)	NC	C	C	NC	C	C
Isopropyl Ether	LC	C	ND	C	C	C
Nitrogen solvents						
Dimethyl Formamide	LC	LC	LC	NC	C	C
Diethylacetamide	LC	C	C	ND	C	ND
Triethanolamine	LC	C	C	ND	C	ND
Aniline	NC	C	C	NC	C	LC
Pyridine	NC	C	C	C	C	LC
Acetonitrile	NC	C	C	C	C	LC
Various						
Phenol, Aqueous, 10 %	ND	NC	ND	LC	C	C
Formaldehyde Solution, 30 %	ND	LC	C	C	C	C
Hydrogen Peroxide, 30 %	ND	C	C	ND	C	ND
Silicone Oil & Mineral Oil	ND	C	ND	C	C	C
Pyridine	ND	C	C	C	C	LC
pH range						
1 - 14	NC	NC	NC	NC	C	C
3 - 12	NC	C	C	NC	C	C
4 - 8	C	C	C	C	C	C

C: Compatible - LC: Limited compatibility
NC: Not compatible - ND: No data available



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UptiDisc™ syringe filters

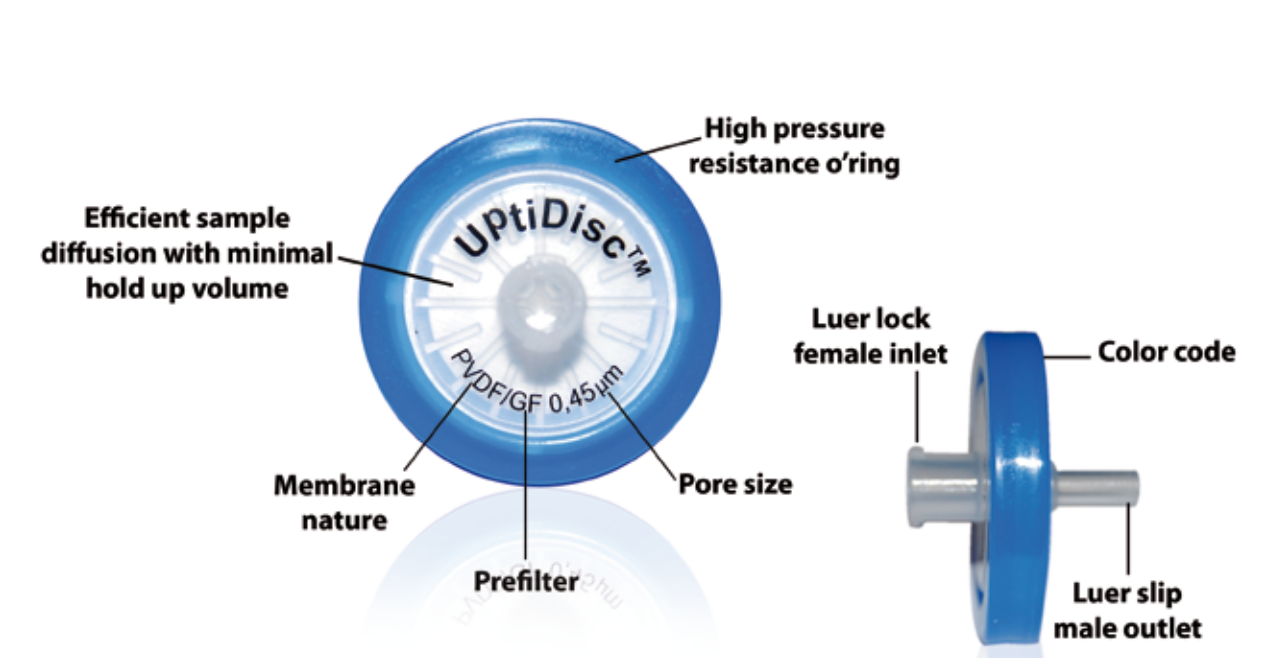
Sample Prep Solutions by Interchim

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> UptiDisc™ technology



> How to choose the right filter

- Select the membrane**

General Biological Sample & Protein Applications	CA	RC	Nylon	PVDF	PP	PTFE
Aqueous samples	CA	RC	Nylon	PVDF	PP	PTFE
Aq./Organic mixtures	CA	RC	Nylon	PVDF	PP	PTFE
Organic samples	CA	RC	Nylon	PVDF	PP	PTFE
- Select filter i.d.**
 - Sample < 2ml: Ø4mm
 - 2ml < Sample < 10ml: Ø13mm
 - 10ml < Sample < 100ml: Ø25mm
- Select the pore size**
 - 0.20µm: UHPLC/HPLC & LC/MS analysis with <3µm columns, GC analysis
 - 0.45µm: HPLC analysis with >3µm columns, Viscous samples or/with suspended solids
 - Additional 1.0µm GF prefilter: Viscous & high suspended solids
 - UptiDisc™ GFX Multi-Layer technology: To filter very high particulate solutions: biological, dissolution testing, environmental samples, food analysis, biofuel analysis

> Quality control

Each batch of UptiDisc™ is tested, to ensure traceability and quality.

QC certificates are available on request



Certificate of Analysis

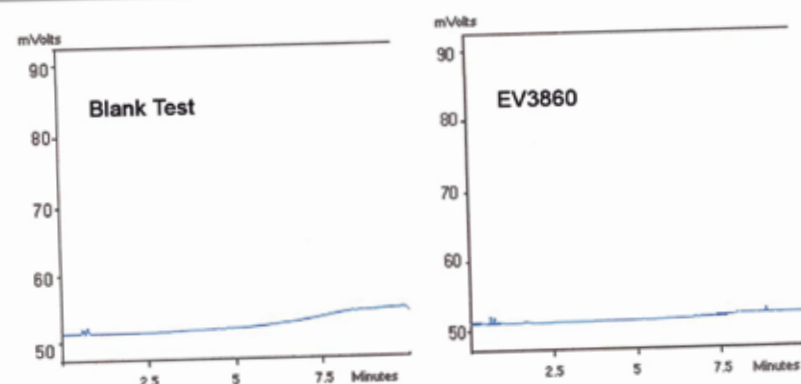
UptiDisc™ CA, 13 mm, 0.20µm	Part Number : EV3860
	Lot Number : EV386-13031

Syringe Filter Lot Characterization

Membrane material	CA	Filtration area (cm²)	0.92
Pore Size	0.20 µm	Holdup volume (µl)	<10
Wettability	Hydrophilic	Volume Throughput (ml)	10
Housing Material	Polypropylene	Maximum Operating Temperature (°C)	50
Inlet/Outlet	Female luer Lock/Male luer slip	Bubble point (psi)	52.2 - 60.9
Burst pressure (psi)	87	Flow rate (ml/min@10psi)	20-30

Bubble point and flow rate were tested by water at 25°C.

HPLC Extractable Test



Specification	Result
No detectable peaks	Pass

We hereby certify that the above stated filters are in compliance with all applicable instructions. This certificate shall not be copied or reproduced without the written approval of Interchim. The document contains information that may be confidential and is intended only for the use of the addressee.

Tested By:
QC Technician.

> Features & Ordering information

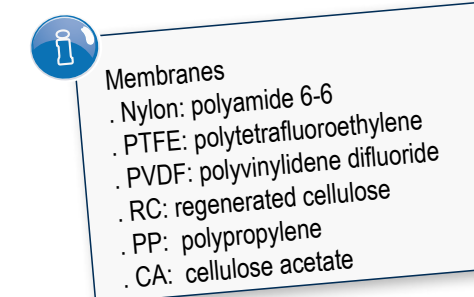
Membrane	i.d.	Pore Size	Prefilter	Inlet	Outlet	Housing	Filtration Area (cm²)	Dead Volume (µl)	Max. Sample Volume (ml)	Max. Pressure (psi)	Part Number	Quantity
Cellulose Acetate	4mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00600	100
Cellulose Acetate	4mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00610	100
Cellulose Acetate	13 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	EV3860	100
Cellulose Acetate	13 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	EV3850	100
Cellulose Acetate	25 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	EV3830	100
Cellulose Acetate/GF	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	EV3820	100
Cellulose Acetate	25 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	EV3810	100
Cellulose Acetate/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	EV3840	100
Nylon	4mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00620	100
Nylon	4mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00630	100
Nylon	13 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00500	100
Nylon	13 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00510	100
Nylon	25 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11410	100
Nylon	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11411	500
Nylon/GF	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54670	100
Nylon	25 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11720	100
Nylon/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11721	500
Nylon/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54680	100
PP hydrophobic	4 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00640	100
PP hydrophobic	4mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00650	100
PP hydrophobic	13 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00580	100
PP hydrophobic	13 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00590	100
PP hydrophobic	25 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11790	100
PP hydrophobic	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11791	500
PP hydrophobic/GF	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54690	100
PP hydrophobic	25 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11800	100
PP hydrophobic	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11801	500
PP hydrophobic/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54700	100
PTFE	4mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00660	100
PTFE	4mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00670	100
PTFE	13 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00520	100
PTFE	13 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00530	100
PTFE	25 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11730	100
PTFE	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11731	500
PTFE/GF	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54710	100
PTFE	25 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11740	100
PTFE/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11741	500
PTFE/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54720	100
PVDF	4mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00680	100
PVDF	4mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	P00690	100
PVDF	13 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00560	100
PVDF	13 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	P00570	100
PVDF	25 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11770	100
PVDF	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11771	500
PVDF/GF	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54730	100
PVDF	25 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	N11780	100
PVDF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	N11781	500
PVDF/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54740	100
RC	4mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	T38070	100
RC	4mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	n.a.	<10	<2	75	T38060	100
RC	13 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	T38090	100
RC	13 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	0.92	<10	<10	87	T38080	100
RC	25 mm	0.2µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	T38110	100
RC	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	T38111	500
RC/GF	25 mm	0.2µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54650	100
RC	25 mm	0.45µm	no	Luer-Lock	Luer slip	Polypropylene	2.98	<50	<80	87	T38100	100
RC	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	T38101	500
RC/GF	25 mm	0.45µm	yes - 1.0µm GF	Luer-Lock	Luer slip	Polypropylene	4.08	<100	<100	87	U54660	100
GFX NYLON	25 mm	0.2µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3060	100
GFX NYLON	25 mm	0.45µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3070	100
GFX PTFE	25 mm	0.2µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3080	100
GFX PTFE	25 mm	0.45µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3090	100
GFX PTFE PHILIC	25 mm	0.2µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3100	100
GFX PTFE PHILIC	25 mm	0.45µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3110	100
GFX PVDF	25 mm	0.2µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3120	100
GFX PVDF	25 mm	0.45µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3130	100
GFX CA	25 mm	0.2µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3140	100
GFX CA	25 mm	0.45µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3150	100
GFX PP	25 mm	0.2µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3670	100
GFX PP	25 mm	0.45µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3680	100
GFX RC	25 mm	0.2µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3690	100
GFX RC	25 mm	0.45µm	yes multi-layer	Luer-Lock	Luer slip	Polypropylene	4.6	<400	<100	75	1A3700	100

> UptiDisc™ GFX Multi-Layer technology

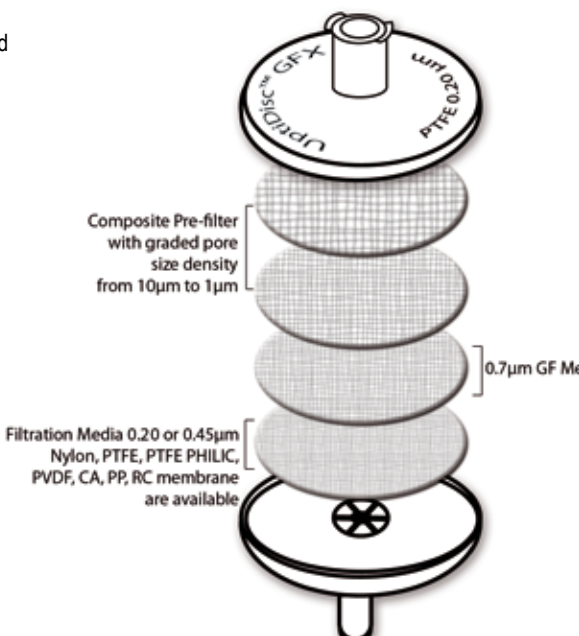
Unique filter design dedicated to filter very high particulate solutions (Biological, Dissolution testing, Environmental samples, Food analysis, Biofuel analysis...).

Our special membrane materials allows you to filter difficult samples with less hand pressure and fast flow rate. They prevent back pressure typically caused by the clogging of an unprotected membrane.

Increased volume throughput (sample volume can be three to seven times larger than conventional filters).



Membranes
 . Nylon: polyamide 6-6
 . PTFE: polytetrafluoroethylene
 . PVDF: polyvinylidene difluoride
 . RC: regenerated cellulose
 . PP: polypropylene
 . CA: cellulose acetate



> Filtration membranes



UptiDisc™ filter membranes are used for aqueous and organic solvent filtration with appropriate filtration apparatus.

Diameter : 13, 25, 47, 90 mm
 Pore size : 0.20µm to 5.0µm
 Membrane : CA, RC, PES, MEC, GMF, Nylon, PP, PVDF, PTFE



> Filtration plates

Uptiplate™ filter plates provide a rapid and efficient filtration of large samples volume. It requires to use of a vacuum filtration device.

Sample volumes may vary from 125 µl to 2 ml.
 Our membranes & pore size cover a large range of applications (Discover more information using the below QR code)



Plate Housing: PP, non-sterile
 Filtration membrane: Glass Fiber, Polypropylene, Polyethylene, Polyethylene UHMW, PVDF, PES
 96 well-plate: 300µl - 800 µl - 2 ml
 384 well-plate : 125 µl
 Pore size : 0.2µm to 25µm (depending on the nature of the membrane)

