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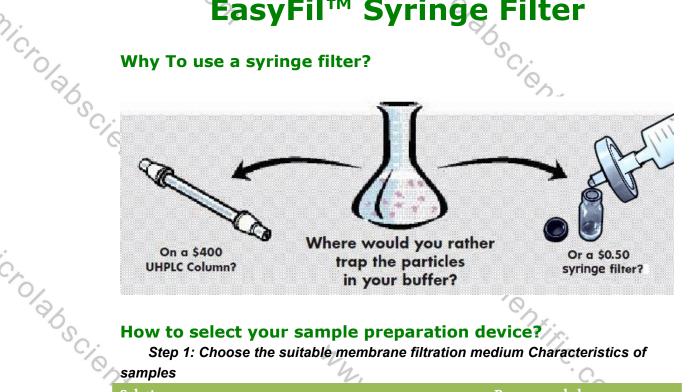
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EasyFil™ Syringe Filter

Why To use a syringe filter?



How to select your sample preparation device?

Step 1: Choose the suitable membrane filtration medium Characteristics of

samples	° C
Solutions	Recommended
Solvent Mixtures	Nylon, Hydrophilic PTFE,
Tissue culture Media, Buffers, Protein Analysis/ Biological	CA, PES, MCE, Hydrophilic
Samples	PVDF
High Particulate Loads	PP,GF, Filter with pre-filter
Aggressive or Pure Organic Solvents	Hydrophobic PTFE, PVDF
	10

	High Particulate Loads	PP,GF, Filter with pre-filter						
í de la compañía de la	Aggressive or Pure Organic Solvents	Hydrophobic PTFE, PVDF Recommend 13mm 25mm d on the nature of your sample re filter is critical before any drug, toxic, re the highest syringe filter membrane to remove particulates from samples						
36	Step2: choose the suitable diameter	Ont:						
C.	Volume of samples	Recommend						
0	<10ml	13mm						
17	<100ml	25mm						
	10 · 'A.	1						
	Step 3: Choose the suitable pore size based on the nature of your sample							
	• Removal of high particulate matter with a pre filter	is critical before any drug, toxic,						
	or dirty environmental sample is filtered to ensure the highest syringe filter membrane performance.							
	 Generally, 0.45 μm porosity filters are used to remove particulates from samples 							
36	and mobile phase solutions. For Sterile-filtration, a 0.20 µm porosity filter can be used.							
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Easyfil[™] syringe competitive price membranes range from Nylon, CA,

<u>8/13 NY 022 - E</u> E: EasyFil

Pore size: 0.22µm

Membrane Material: Nylon

Diameter: 13mm

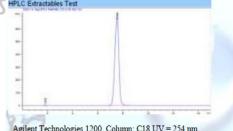
Validated HPLC Performance

S: Syringe Filter

Features

- Color coding of each unit for easy identification
- Added sample distribution ring
- Resistance high pressure
- crolabscient Only Layer Membrane Structure, less dissolution content
 - Passed HPLC Test





Agilent Technologies 1200, Column: C18 UV = 254 nm Mob.phase:MeOH/H2O:20:80, Temperature: 25°C, Flow rate:0.8ml/min, sample:2mg/ml Bergenin(in Methanol)

Specification

YOSCI.	 Resistance high pressure Only Layer Membrane Structure, le content Passed HPLC Test 	Agilent Technologies 1200, Column: C18 UV = 254 nm Mob phase:MeOH/H_O:20:30, Temperature: 25°C, I rate:0.8ml/min, sample:2mg/ml Bergenin(in Methanol) 13mm 25mm 0.92 2.98 0.22 0.45 0.22 0.45 0.92 0.45 0.22 0.45			
olabscien	Specification	nicrol	Mob p rate:0.3	hase:MeOH/H ₂ O:20:80, Sml/min, sample:2mg/ml I	
C/C	Parameters	13m	ım	25 1	nm .
	Filtration area (cm2)				8
	Normal Pore Size(µm)	0.22	0.45	0.22	0.45
	Holdup volume (µl)	<1(0	<10	0
	Sample volume (ml)	<1(0	<12	0
121	Inlet/Outlet	Fe	male luer loc	k/Male luer slij	p
-05 0	Maximum Operating Temperature	50%	°C	50°	°C
0	Maximum Operating Pressure (psi)	>8	7	>8	7
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	Add: 16/F. Kowloon Building. 5		oad Monal	ok Kowloo	n Honaka





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Order Information:



- Hydrophilic property \geq
- \triangleright Uniform aperture
- Excellent chemical stability and flexibility, durable ≻
- Suitable for filtration of aqueous and most organic ≻ solvents
- Compatibility with various sterilizing methods

	(
			≻ Нус	drophilic property		
2:-			> Uni	form aperture	26	
°C/	500	Course and	► Exc	ellent chemical sta	bility and flexib	oility, durable
0/2	XX		> Suit	table for filtration	n of aqueous a	nd most organi
96			solv	vents	C'Ax	
SC.	Nylon Syring	ge Filter	> Cor	npatibility with va	rious sterilizing	methods
0	Part No	Diameter	Pore Size	Wettability	Package	Package
	SI3NY022E	13mm	0.22	Hydrophilic	100pcs/box	1000/bag
	S13NY045E	13mm	0.45	Hydrophilic	100pcs/box	1000/bag
	S25NY022E	25mm	0.22	Hydrophilic	100pcs/box	1000/bag
	S25NY045E	25mm	0.45	Hydrophilic	100pcs/box	1000/bag
		0		- / ·		

- Strong Hydrophobic property
- Broad solvent chemical compatibility
- crolabscientin Excellent particle retention
 - Suitable for filtration all Organic solutions, even for
 - acetone, DMSO, THF, etc. and Gas filtration
 - Compatibility with various sterilizing methods
 - Normally used with pH range 1-14



PTFE Syringe Filter Hydrophobic

Part No	Diameter	Pore Size	Wettability	Package	Package
S13PTB022E	13mm	0.22	Hydrophobic	100pcs/box	1000/bag
S13PTB045E	13mm	0.45	Hydrophobic	100pcs/box	1000/bag
S25PTB022E	25mm	0.22	Hydrophobic	100pcs/box	1000/bag
S25PTB045E	25mm	0.45	Hydrophobic	100pcs/box	1000/bag



PVDF Syringe Filter

Hydrophobic

- Hydrophobic property
- \sim High mechanical and tensile strength $^{\circ}$
- Broad chemical and temperature resistance
- Suitable for the filtration of gas, steam and high temperature liquids.
- Compatibility with various sterilizing methods \triangleright
- \triangleright Normally used with pH range 2-13.

Part No Diameter Pore Size Wettability Package Package S13PVB022E 13mm 0.22 Hydrophobic 100pcs/box 1000/bag S13PVB045E Hydrophobic 100pcs/box 1000/bag 13mm 0.45 S25PVB022E 25mm 0.22 Hydrophobic 100pcs/box 1000/bag S25PVB045E Hydrophobic 100pcs/box 1000/bag 25mm 0.45

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- Hydrophilic property \triangleright
- High flow rate and high Throughputs ≻
- ⊳ Low protein binding
- ≻ Low in extractables,
- \triangleright Suitable for removing small particles, bacteria, viruses and
- fungi from aqueous phase.
- Normally used with PH 3-12.



	\triangleright	 High flow rate and high Throughputs Low protein binding Low in extractables, Suitable for removing small particles, bacteria, viruses and fungi from aqueous phase. Normally used with PH 3-12. Art No Diameter Pore Size Wettability Package Package I3PES022E I3mm 0.22 Hydrophilic I00pcs/box I000/bag I3PES045E I3mm 0.45 Hydrophilic I00pcs/box I000/bag I000/bag 					
Ъ.	\triangleright	High flow rate and high Throughputs Low protein binding Low in extractables, Suitable for removing small particles, bacteria, viruses and fungi from aqueous phase. Normally used with PH 3-12.Image: Pes Syringe FilterImage: Normally used with PH 3-12.Image: Pore SizeVettabilityPackageImage: Normally used with PH 3-12.Image: Pore SizeVettabilityPackageImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normally used with PH 3-12.Image: Pore SizeImage: Pore SizeImage: Pore SizeImage: Normal					
10	\triangleright	Low prot	tein binding				
	\triangleright	Low in e	xtractables,				Sto .
0	\blacktriangleright	Suitable	for removing	small particles	s, bacteria,	*	
·0.		viruses a	nd				
C,	\succ	fungi fro	m aqueous phas	DI	DEC Cominger Filter		
6	~ >	Normally	y used with PH	3-12. 4	FI	Lo Syringe Fille	
	14.			1/2			0
	Part I	No	Diameter	Pore Size	Wettability	Package	Package
	S13PE	S022E	13mm	0.22	Hydrophilic	100pcs/box	1000/bag
	S13PE	 High flow rate and high Throughputs Low protein binding Low in extractables, Suitable for removing small particles, bacteria, viruses and fungi from aqueous phase. Normally used with PH 3-12. PES Syringe Filter PES Syringe Filter Package S13PES022E 13mm 0.22 Hydrophilic 100pcs/box 1000/bag S13PES022E 25mm 0.22 Hydrophilic 100pcs/box 1000/bag S25PES022E 25mm 0.22 Hydrophilic 100pcs/box 1000/bag S25PES022E	1000/bag				
	S25P	ES022E	25mm	0.22	Hydrophilic	100pcs/box	1000/bag
0	S25P	ES045E	25mm	0.45	Hydrophilic	100pcs/box	1000/bag
~~~	-						



Hydrophilic property

Low protein binding: suitable for aqueous protein solutions

- Nitrate free: suitable for groundwater filtration
- Quiet uniform pore size structure
- Extensive pore size specification
- $\triangleright$ Cell retention and particle collection

6	Part No	Diameter	Pore Size	Wettability	Package	Package
0/	S13CA022E	13mm	0.22	Hydrophilic	100pcs/box	1000/bag
96	S13CA045E	13mm	0.45	Hydrophilic	100pcs/box	1000/bag
S	S25CA022E	25mm	0.22	Hydrophilic	100pcs/box	1000/bag
C.	S25CA045E	25mm	0.45	Hydrophilic	100pcs/box	1000/bag
		2017				
	Special	treated PTFE	with Hydrophili	ic property		
	≻ Broad o	chemical resist	ance,	Cr		

- Special treated PTFE with Hydrophilic property
- Broad chemical resistance,
- Excellent particle retention  $\triangleright$
- Compatibility with various sterilizing methods ≻
- Suitable for filtration all solutions, even for acetone, DMSO, THF, etc.
- Normally used with pH range 1-14 hhu mic,



PTFE Syringe Filter (Hydrophilic) C. COM





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	°C			· nj				
	Part No	Diameter	Pore Size	Wettability	Package	Package		
2	SI3PTL022E	13mm	0.22	Hydrophilic	100pcs/box	1000/bag		
1i	SI3PTL045E	13mm	0.45	Hydrophilic	100pcs/box	1000/bag		
C.C.	S25PTL022E	25mm	0.22	Hydrophilic	100pcs/box	1000/bag		
2	S25PTL045E	25mm	0.45	Hydrophilic	100pcs/box	1000/bag		
	<ul> <li>Better hydrophilic property</li> <li>Low protein binding</li> <li>Great water flux and better cutoff effect</li> </ul>							



- Low protein binding  $\geqslant$
- Great water flux and better cutoff effect
- Ideal for aqueous based samples, tissue culture and  $\triangleright$ sensitive biological samples
- Has a lower chemical resistance ≻

	MCE Syrir	nge Filter	► Has	0	l resistance	t 121°C for 15
96	Part No	Diameter	Pore Size	Wettability	Package	Package
S	S13MCE022E	13mm	0.22	Hydrophilic	100pcs/box	1000/bag
°C/	SI3MCE045E	13mm	0.45	Hydrophilic	100pcs/box	1000/bag
0	S25MCE022E	25mm	0.22	Hydrophilic	100pcs/box	1000/bag
	S25MCE045E	25mm	0.45	Hydrophilic	100pcs/box	1000/bag
*	➢ 100% poly	bic property propylene const		icrolabs		
0/			lter dissolution	samples	M. Loli	

- Hydrophobic property
- 100% polypropylene construction
- Excellent for difficult-to-filter dissolution samples
- Acid and base resistant
- Wide Chemical compatibility with solvents
- High throughput for viscous samples



	<ul> <li>&gt; 100% pol</li> <li>&gt; Excellent</li> <li>&gt; Acid and</li> <li>&gt; Wide Che</li> </ul>	for difficult-to- base resistant emical compatib	filter dissolution ility with solven		PP Syrin	ge Filter
	Part No	Diameter	Pore Size	Wettability	Package	Package
	SI3PP022E	13mm	0.22	Hydrophilic	100pcs/box	1000/bag
	SI3PP045E	13mm	0.45	Hydrophilic	100pcs/box	1000/bag
	S25PP022E	25mm	0.22	Hydrophilic	100pcs/box	1000/bag
<ul> <li>Excellent for difficult-to-filter dissolution samples</li> <li>Acid and base resistant</li> <li>Wide Chemical compatibility with solvents</li> <li>High throughput for viscous samples</li> <li>Part No</li> <li>Diameter</li> <li>Pore Size</li> <li>Wettability</li> <li>Package</li> <li>Package</li> <li>Si3PP022E</li> <li>I3mm</li> <li>0.22</li> <li>Hydrophilic</li> <li>100pcs/box</li> <li>1000/bag</li> <li>1000/bag</li> </ul>			1000/bag			
		/		labsoiontifia co		
0					• ^	
Cir.	rechnique Quest	tions, Please con	ntact <u>support(a</u>	microlabscienti	<u>nc.com</u>	3

abscientiric. General Questions, Please contact info@microlabscientific.com Technique Questions, Please contact support@microlabscientific.com





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# Chemical Compatibility Table

Note: +:Resistant o:					~6 _~	Table	2		
Solvent	MCE	CA	NY	PTFE	H-PTF	PVDF	PES	GF	Р
Acetaldehyde	_	_	o	+	+	+		+	
Acetic acid, 100 %	_	_	_	+	+	+	+	+	•
Acetone	_		+	+	+	_	_	+	
Acetonitrile	_	_	+	+	+	+	+	+	
Ammonia, 25 %	_	_	_	+	+	+	+	+	
Benzene	+	+	+	+	+	о		+	
<i>n</i> -Butanol	+	+	ο	+	+	+	+	+	
Cyclohexane	+	+	o	+	+	+	+	+	
Dichloromethane	+	_	_	+	+	+	_	+	
Benzene n-Butanol Cyclohexane Dichloromethane Diethyl ether Dimethylformamide	ο	ο	+	+	+	+	+	+	
Dimethylformamide	_	_	+	+	+	_	_	+	
1,4-Dioxane	_	_	+	+	+	o	_	+	
Ethanol	_	+	+	+	+	+	+	+	
Ethyl acetate	_	_	+	+	+	+	+	+	
Ethylene glycol	ο	ο	+	+	+	+	+	+	
Formic acid, 100 %	+	_	_	+	+	+	+	+	
Hydrochloric acid, 30 %	_	_	_	+	+	+	+	+	
Methanol	_	_	+	+	+	+	+	+	
Nitric acid, 65 %	_	_	_	0	0	0	-	+	
Oxalic acid, 10 % aqueous	+	_	_	+	+	+		+	
Petroleum ether	+	+	+	+	+	+	+	+	
Hydrochloric acid, 30 % Methanol Nitric acid, 65 % Oxalic acid, 10 % aqueous Petroleum ether Phosphoric acid, 80 %	_	_	_	+	+	o		+	
Potassium hydroxyde,	_	_	+	+	+	o	+	+	
2-Propanol	+	+	+	+	+	+	+	+	
Sodium hydroxyde, 1 mol/L	_	_	+	+	+	0	0	ο	
Tetrachloromethane	+	_	+	+	+	ο		+	
Tetrahydrofuran	_	_	ο	+	+	+	_	+	
Toluene	+	_	+	+	+	+	+	+	
Trichloroethene	+	+	ο	+	+	+		+	
Toluene Trichloroethene Trichloromethane Urea Water	+	_	_	+	+	+	_	+	
Urea	+	+	+	+	+	+		+	
Water	+	+	+	+	+	+	+	+	
Xylene	+	+	+	+	+	0		+	
C. C.		+	ic,				. /		

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