

# Vacuum Filtration Systems



NEST Disposable Vacuum Filtration System is useful for large volume sample separation and sterilization for tissue culture media and other biological buffers. The units include PES or PVDF membrane filters with graduated filter tops made with polystyrene, and Acrylonitrile-Butadiene-Styrene necks with polystyrene receiving bottles. A separated sterile polyethylene cap is included. Filtration system is manufactured from raw material of high transparency polystyrene (PS) in three different volumes: 250mL / 500mL / 1000mL. They are available in three styles: complete filter/storage bottle systems, bottle top filters, and receiving bottles only.

## Product Parameters

Volume (mL)	Membrane Dia(mm)	Capacity(mL)	Max.Temp (°C)	Neck Dia(mm)	Height (mm)	Material of Neck
250	50	250	45	45	198	ABS
500	90	500	45	45	247	ABS
1000	90	1000	45	45	280	ABS

Membrane Type	Hydrophilicity	Features	Application Directions	Cautions
PES	Hydrophilic	Low protein adsorption, high flow rate, wide PH range, high chemical compatibility, good heat resistance	For general culture media and aqueous solutions, polar or middle-polar solvents, neutral aqueous solutions	Should not be used for chloroform, esters, amides and strong acids or strong bases.
PVDF	Hydrophilic	Wide practicability, good oxidation resistance and heat resistance	May be used for aqueous solutions and most solvents, including strong non-polar solvents. Ideal for preparations of HPLC and GC	Should not be used for strong acids and bases
MCE	Hydrophilic	Strong chemical compatibility and low protein adsorption, the optimum pH range is 3-6;	Used for particle analysis of general culture media and aqueous solutions. HPLC sample preparation.	The set should not be used for filtration of ethanol and alkaline solutions. The working temperature should not be over 40 C .
CA	Hydrophilic	High flow rate and heat stability as well as very low adsorption, stable within the range of pH 4-8.	It may resist most alcohols and oils, and is suitable for sterling filtration of aqueous solutions, buffers, serum and culture media, as well as filtration of the moving phase of HPLCD.	The CA membrane may accommodate a smaller volume of buffer since it has low hydrophilia.

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## Features

- High flow rates and throughput.
- Low protein binding and low chemical extractable.
- Pore size: 0.22  $\mu\text{m}$ .
- Non-Pyrogenic, DNase/Rnase free.
- Sterilized by E-beam, SAL=10<sup>-6</sup>.
- Individually packaged in sterile bag.

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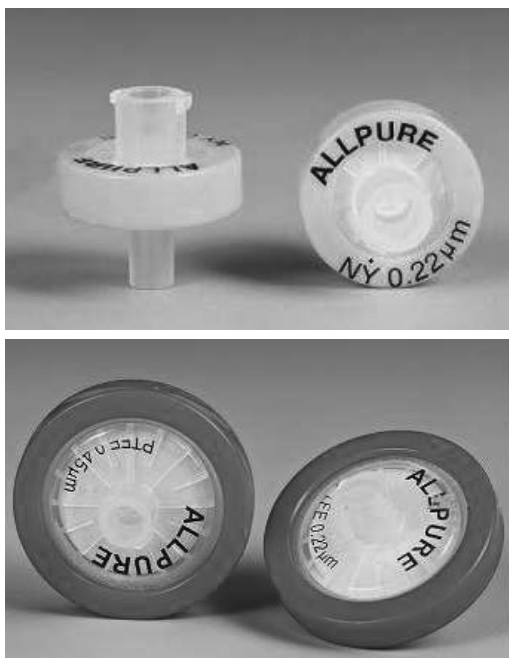
CA Membrane Cat.No.	PES Membrane Cat.No.	MCE Membrane Cat.No.	PVDF Membrane Cat.No.	Volume (mL)	Pore Density ( $\mu\text{m}$ )	/Pack	/Case
342302	342002	342202	342102	250	0.10	1	12
342301	342001	342201	342101	250	0.22	1	12
342303	342003	342203	342103	250	0.45	1	12
343302	343002	343202	343102	500	0.10	1	12
343301	343001	343201	343101	500	0.22	1	12
343303	343003	343203	343103	500	0.45	1	12
344302	344002	344202	344102	1000	0.10	1	12
344301	344001	344201	344101	1000	0.22	1	12
344303	344003	344203	344103	1000	0.45	1	12

## Bottle Top Vacuum Filter Only

Cat.No.	Volume (mL)	Pore Density ( $\mu\text{m}$ )	/Pack	/Case
342011	250	0.22 $\mu\text{m}$ , PES	1	24
342111	250	0.22 $\mu\text{m}$ , PVDF	1	24
343011	500	0.22 $\mu\text{m}$ , PES	1	24
343111	500	0.22 $\mu\text{m}$ , PVDF	1	24
344011	1000	0.22 $\mu\text{m}$ , PES	1	24
344111	1000	0.22 $\mu\text{m}$ , PVDF	1	24

## Receiving Bottle

Cat.No.	Volume (mL)	/Pack	/Case
342021	250	1	24
343021	500	1	24
344021	1000	1	12



## Syringe Filters

### Features

- For sample volumes of 2mL to 100mL.
- Retention volume <115 $\mu\text{L}$ .
- Maximum operating temperature: 100°C autoclave at 125°C for 15 min.
- Maximum operating pressure approximately 100 psi.
- Individually wrapped.
- Non – pyrogenic, Non – cytotoxic.
- DNase / RNase – free, Human DNA – free.

PES Membrane Cat.No.	PVDF Membrane Cat.No.	Housing Diameter (mm)	Pore Density ( $\mu\text{m}$ )	/Case
380111	380121	25	0.22	50
380211	380221	25	0.45	50
380112	380122	13	0.22	50
380212	380222	13	0.45	50