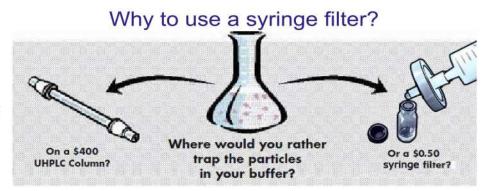




#### Syringe Filter

## **Features**

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



## Step: 1 Choose the suitable membrane filtration medium Characteristics of samples

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

#### Step: 2 Choose the suitable diameter

| Volume of samples | Recommended |
|-------------------|-------------|
| <10ml             | 13mm        |
| <100ml            | 25mm        |

## 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 os filtered to ensure the highest syringe filter membrane performance.
- Generally, 0.45um porosity filters are used to remove particulates from samples and mobile phase solutions.
  For Sterile-filtration, a 0.20um porosity filter can be used.

| Parameters                        | 13 m m                          |      | 25 m m |      |
|-----------------------------------|---------------------------------|------|--------|------|
| Filtration area (cm2)             | 0.9                             | 2    | 2.9    | 8    |
| Normal Pore Size (µm)             | 0.22                            | 0.45 | 0.22   | 0.45 |
| Holdup volume (μl)                | <10                             | 0    | <10    | 0    |
| Smaple volumne (ml)               | <10                             |      | <120   |      |
| Inlet /Outlet                     | Female luer lock/Male luer slip |      |        | ip   |
| Maxnimum Operating Temperature    | 50°                             | С    | 50°    | С    |
| Maxnimum Operating Pressure (psi) | >8                              | 7    | >8     | 7    |





# **Chemical Compatibility Table**

Note +: Resistant o: Limited Resistant -: Not Resistant

| Solvent                   | MCE          | CA               | NY  | PTE | H-PTF | PVDF | PES | GF | PP |
|---------------------------|--------------|------------------|-----|-----|-------|------|-----|----|----|
| Acetaldehyde              | _            |                  | 0   | +   | +     | +    |     | +  | 0  |
| Acetic acid, 100%         | _            | _                |     | +   | +     | +    | +   | +  | +  |
| Acetone                   | _            |                  | +   | +   | +     |      |     | +  | +  |
| Acetonitrile              |              | 1-8              | +   | +   | +     | +    | +   | +  | +  |
| Ammonia, 25%              | _            | _                | -   | +   | +     | +    | +   | +  | +  |
| Benzene                   | +            | +                | +   | +   | +     | 0    |     | +  | 0  |
| n-Butanol                 | +            | +                | 0   | +   | +     | +    | +   | +  | +  |
| Cyclohexane               | +            | +                | Ö   | +   | +     | +    | +   | +  | +  |
| Dichloromethane           | +            |                  | _   | +   | +     | +    |     | +  | _  |
| Diethyl ether             | 0            | 0                | +   | +   | +     | +    | +   | +  | O  |
| Dim e thylform am id e    | _            | -                | +   | +   | +     |      | _   | +  | +  |
| 1,4-Dioxane               | _            | _                | +   | +   | +     | 0    | -   | +  | 0  |
| Ethanol                   | 5 <u>-</u> 1 | +                | +   | +   | +     | +    | +   | +  | +  |
| Ethyl acetate             | -:           | -                | +   | +   | +     | +    | +   | +  | o  |
| Ethylene glycol           | 0            | 0                | +   | +   | +     | +    | +   | +  | +  |
| Formic acid, 100%         | +            | _                | _ ( | +   | +     | +    | +   | +  | +  |
| Hydrochloric acid, 30%    | _            |                  | _   | +   | +     | +    | +   | +  | +  |
| Methanol                  | _            | -                | +   | +   | +     | +    | +   | +  | +  |
| Nitric acid, 65%          | _            | 1-1              | _   | 0   | 0     | 0    |     | +  | _  |
| Oxalic acid, 10% aqueous  | +            | <u>-</u>         | I   | +   | +     | +    |     | +  | +  |
| Petroleum ether           | +            | +                | +   | +   | +     | +    | +   | +  | +  |
| Phosphoric acid, 80%      | 1            | Į                | 1   | +   | +     | 0    |     | +  | +  |
| Potassium hydroxyde,      | _            | _                | +   | +   | +     | 0    | +   | +  | +  |
| 2-Propanol                | +            | +                | +   | +   | +     | +    | +   | +  | +  |
| Sodium hydroxyde, 1 mol/L | _            | _                | +   | +   | +     | 0    | 0   | 0  | +  |
| Tetrachloromethane        | +            | _                | +   | +   | +     | 0    |     | +  | 0  |
| Tetrahydrofuran           | 1 -          | 1 <del>-</del> 0 | 0   | +   | +     | +    | _   | +  | 0  |
| Toluene                   | +            |                  | +   | +   | +     | +    | +   | +  | 0  |
| Trichloroethene           | +            | +                | 0   | +   | +     | +    |     | +  | 0  |
| Trichloromethane          | +            | _                | -   | +   | +     | +    | _   | +  |    |
| U re a                    | +            | +                | +   | +   | +     | +    |     | +  | +  |
| Water                     | +            | +                | +   | +   | +     | +    | +   | +  | +  |
| Xylene                    | +            | +                | +   | +   | +     | 0    |     | +  | 0  |





## PES Syringe Filter



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

| Part No  | Diameter | Pore Size | Package |
|----------|----------|-----------|---------|
| QPES1345 | 13 m m   | 0.45um    | Pk/100  |
| QPES1322 | 13 m m   | 0.22um    | Pk/100  |
| QPES2545 | 25 m m   | 0.45um    | Pk/100  |
| QPES2522 | 25 m m   | 0.22um    | Pk/100  |

## MCE Syringe Filter



- Better hydrophilic property
- Low protein binding
- Great water flux and better cutoff effect
- Ideal for aqueous based samples, tissue culture and sensitive biological samples
- Has a lower chemical resistance
- ➡ Autoclave: sterilized by dry heat at 121°C for 15mins

| Part No    | Diameter | Pore Size | Package |
|------------|----------|-----------|---------|
| QMC1345    | 13 m m   | 0.45 u m  | Pk/100  |
| QMCE1322   | 13 m m   | 0.22um    | Pk/100  |
| Q M CE2545 | 25 m m   | 0.45 u m  | Pk/100  |
| Q M CE2522 | 25 m m   | 0.22um    | Pk/100  |

## **CA Syringe Filter**



- 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
- ➡ Cell retention and particle collection

| Part No   | Diameter | <b>Pore Size</b> | Package |
|-----------|----------|------------------|---------|
| Q13CA022E | 13mm     | 0.22um           | Pk/100  |
| Q13CA045E | 13mm     | 0.45um           | Pk/100  |
| Q25CA022E | 25mm     | 0.22um           | Pk/100  |
| Q25CA045E | 25mm     | 0.45um           | Pk/100  |





## Order Information:

### **Nylon Syringe Filter**



- Hydrophilic property
- Uniform aperture
- Excellent chemical stability and flexibility, durable
- Suitable for filtration of aqueous and most organic solvent
- Compatibility with various sterlizing methods

| Part No | Diameter | Pore Size | Package |
|---------|----------|-----------|---------|
| QN1345  | 13 m m   | 0.45 u m  | Pk/100  |
| QN1322  | 13 m m   | 0.22um    | Pk/100  |
| QN2545  | 25 m m   | 0.45 u m  | Pk/100  |
| QN2522  | 25 m m   | 0.22um    | Pk/100  |

# PTFE Syringe Filter (Hydrophilic)



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

| Part No    | Diameter | Pore Size | Package |
|------------|----------|-----------|---------|
| Q13PTL022E | 13mm     | 0.22um    | Pk/100  |
| Q13PTL045E | 13mm     | 0.45um    | Pk/100  |
| Q25PTL022E | 25mm     | 0.22um    | Pk/100  |
| Q25PTL045E | 25mm     | 0.45um    | Pk/100  |

## PVDF Syringe Filter Hydrophilic



- Hydrophonic 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

| Part No    | Diameter   | Pore Size | Package |
|------------|--|-----------|---------|
| Q13PVL022E | THE PARTY OF THE P |           | Pk/100  |
| Q13PVL045E | 13mm   | 0.45um    | Pk/100  |
| Q25PVL022E | 25mm   | 0.22um    | Pk/100  |
| Q25PVL045E | 25mm   | 0.45um    | Pk/100  |