

# Syringe Filters Chemical Compatibility

MEMBRANE TYPE:	PES	PVDF	CA
<b>ACIDS</b>			
Acetic 5%	R	R	L
Acetic 10%	R	R	L
Acetic 25%	R	R	N
Acetic, Glacial	R	R	N
Boric	-	-	-
Formic 25%	-	-	L
Hydrochloric 15%	R	L	L
Hydrochloric 25%	R	-	N
Hydrochloric, conc.	L	N	N
Hydrofluoric 10%	-	-	N
Hydrofluoric 35%	-	-	N
Nitric 25%	R	-	N
Nitric 6N, 38%	L	R	N
Nitric, conc.	N	N	N
Phosphoric 25%	R	-	L
Sulphuric 25%	N	-	N
Sulphuric 6N, 29%	N	-	N
Sulfuric, Conc.	N	N	N
Trichloroacetic 10%	-	R	N
<b>ALKALINES</b>			
Ammonium Hydroxide 25%	R	L	N
Formalin 30%	R	-	L
Sodium Hydroxide 3N, 12%	R	R	N
<b>ALCOHOLS</b>			
Amyl Alcohol	N	R	L
Benzyl Alcohol	L	L	L
Butyl Alcohol	L	R	L
Butyl Cellosolve	-	-	N
Ethanol 70%	L	R	L
Ethanol 98%	N	R	N
Ethylene glycol	R	R	L
Glycerol	R	R	L
Isobutyl alcohol	L	L	L
Isopropanol, n-Propanol	R	R	L
Methanol 98%	L	R	N
Methyl Cellosolve	-	-	L
Propylene glycol	R	R	L
Phenol, Aqueous 10%	-	R	-
<b>OXIDES / ETHERS</b>			
DMSO	N	N	N
Dioxane & Tetrahydrofuran	L	L	N
Ethyl Ether	R	R	L
Isopropyl Ether	-	R	-

Syringe Filters Ordering Information		
Cat. No.	Description	Pack Size
E4780-1226	0.22 µm Syringe Filter, PES (Sterile), Blue, Ø 33mm	100
E4780-1456	0.45 µm Syringe Filter, PES (Sterile), Yellow, Ø 33mm	100
E4780-1221	0.22 µm Syringe Filter, PVDF (Sterile), Blue, Ø 33mm	100
E4780-1451	0.45 µm Syringe Filter, PVDF (Sterile), Yellow, Ø 33mm	100
E4780-1223	0.22 µm Syringe Filter, CA (Sterile), Blue, Ø 33mm	100
E4780-1453	0.45 µm Syringe Filter, CA (Sterile), Yellow, Ø 33mm	100

MEMBRANE TYPE:	PES	PVDF	CA
<b>HYDROCARBONS</b>			
Hexane	L	R	L
Xylene	N	N*	N*
Kerosene	R	R	L
Tetralin, Decalin	-	R	N
Toluene, benzene	N	R	L
<b>HALOGENATED HYDROCARBONS</b>			
Carbon Tetrachloride	N	N	N
Chloroform	N	R	N
Methylene Chloride	N	N	N
Monochlorobenzene	-	-	N
Trichloroethylene	M	R	N
<b>KETONES</b>			
Acetone	N	N	N
Cyclohexanone	N	N	N
Isopropylacetone	-	N	-
Methyl Ethyl Ketone	N	N	N
Methyl Isobutyl Ketone	-	N	N
<b>ESTERS</b>			
Amyl Acetate	L	-	N
Amyl Propyl & Butyl Acetate	-	-	L
Benzyl Benzoate	-	-	-
Butyl Acetate	N	-	N
Ethyl Acetate & Methyl Acetate	N	R/L	N
Isopropyl Myristate	-	-	-
Methyl Cellosolve Acetate	-	-	N
Propylene Glycol Acetate	-	-	-
Tricresyl Phosphate	-	-	-
Isopropyl Acetate	-	R	L
<b>SOLVENTS WITH NITROGEN</b>			
Acetonitrile	N	N	N
Aniline	-	-	N
Diethylacetamide	N	N	N
Dimethyl formamide	N	N	N
Pyridine	N	R	N
Triethanolamine	-	N	-
<b>MISCELLANEOUS</b>			
Formaldehyde Solution 30%	R	R	L
Hydrogen Peroxide 30%	N	R	N
Silicone Oil & Mineral Oil	R	R	R

**PES: Polyethersulfone PVDF: Polyvinylidene fluoride CA: Cellulose Acetate**

**R = Recommended.** No significant change observed in flow rate or bubble point of the membrane, nor any visible indication of chemical attack.

**L = Limited Recommended Use.** Moderate changes in physical properties. The filter may be suitable for short term, non-critical use.

**N = Not Recommended.** The membrane may become unstable.

- = No Info Available.

**This chart is intended as a guide only.** STARLAB cannot accept any responsibility for any errors or omissions. The housing of the syringe filters is made from polypropylene (PP). PP is chemically resistant to all the chemicals listed in this table and therefore the it is the chemical resistance of the different types of membranes which is the limiting part.

\*The exception is Xylene. PVDF and CA are resistant to Xylene, but PP is not. Therefore we do not recommend filtration of Xylene with these syringe filters.

August 2018.