

Syringe Filter Chemical Compatibility

CHEMICAL	NYLON	PTFE	PVDF	PES	CA	RC	PP	GF
Acids								
Acetic, Glacial	LC	C	C	C	IC	C	C	C
Acetic, 25%	C	C	C	C	LC	C	C	C
Hydrochloric, Concentrated	LC	C	C	C	IC	IC	C	C
Hydrochloric, 25%	LC	C	C	C	IC	IC	C	C
Sulfuric, Concentrated	LC	C	IC	IC	IC	IC	C	C
Sulfuric, 25%	LC	C	C	C	IC	LC	C	C
Nitric, Concentrated	LC	C	C	IC	IC	IC	C	LC
Nitric, 25%	LC	C	C	C	IC	IC	C	LC
Phosphoric, 25%	LC	C	ND	ND	C	LC	C	ND
Formic, 25%	LC	C	ND	ND	IC	C	C	C
Trichloroacetic, 10%	LC	C	ND	ND	C	C	C	ND
Bases								
Ammonium Hydroxide, 25%	C	C	LC	C	C	LC	C	C
Sodium Hydroxide, 3 Normal	C	C	C	C	IC	LC	C	IC
Alcohols								
Amyl Alcohol (Butanol)	C	C	C	C	C	C	C	C
Benzyl Alcohol	C	C	C	ND	LC	C	C	IC
Butyl Alcohol	C	C	C	C	C	C	C	C
Ethanol, 70%	LC	C	C	C	C	C	C	C
Ethanol, 98%	C	C	C	C	C	C	C	C
Ethylene Glycol	C	C	C	C	C	C	C	C
Glycerine (Glycerol)	C	C	C	C	C	C	C	C
Isopropanol	C	C	C	C	C	C	C	C
Methanol, 98%	C	C	C	C	C	C	C	C
n-Propanol	C	C	C	C	C	C	C	C
Propylene Glycol	C	C	C	C	IC	C	C	C
Esters								
Ethyl Acetate/Methyl Acetate	C	C	C	IC	IC	C	LC	C
Amyl Propyl/Butyle Acetate	C	C	IC	IC	LC	C	LC	C
Propyl Acetate	C	C	IC	IC	LC	C	LC	ND
Propylene Glycol Acetate	ND	C	ND	IC	IC	C	C	ND
2-Ethoxyethyl Acetate	ND	C	ND	IC	LC	C	ND	ND
Methyl Cellosolve Acetate	ND	C	ND	IC	IC	C	C	C
Benzyl Benzoate	C	C	ND	IC	C	C	ND	ND
Isopropyl Myristate	C	C	ND	IC	C	C	ND	ND
Tricresyl Phosphate	ND	C	ND	IC	C	C	ND	ND
Organic Oxides								
Ethyl Ether	C	C	C	C	C	C	LC	ND
Dioxane/Tetrahydrofuran	C	C	LC	IC	IC	C	C	C
Triethanolamine	C	C	ND	ND	C	C	ND	ND
Dimethylsulfoxide (DMSO)	C	C	IC	IC	IC	C	C	C
Isopropyl Ether	ND	C	C	C	C	C	C	ND
Amines and Amides								
Dimethyl Formamide	LC	C	IC	IC	IC	LC	C	C
Diethylacetamide	C	C	ND	ND	IC	C	ND	C
Triethanolamine	C	C	ND	ND	C	C	ND	ND
Aniline	ND	C	ND	ND	IC	C	ND	ND
Pyridine	C	C	IC	IC	IC	C	IC	C
Acetonitrile	C	C	C	LC	IC	C	C	C
Halogenated Hydrocarbons								
Methylene Chloride	LC	C	C	IC	IC	C	LC	C
Chloroform	C	C	C	IC	IC	C	LC	C
Trichloroethylene	C	C	C	IC	C	C	C	C
Monochlorobenzene, Freon	C	C	C	LC	C	C	C	C
Carbon Tetrachloride	C	C	C	IC	LC	C	LC	C
Hydrocarbons								
Hexane, Xylene	C	C	C	IC	C	C	IC	C
Toulene, Benzene	C	C	C	IC	C	C	IC	C
Kerosene, Gasoline	C	C	C	LC	C	C	LC	ND
Tetralin, Decalin	ND	C	C	ND	C	C	ND	ND
Ketones								
Acetone	C	C	IC	IC	IC	C	C	C
Cyclohexanone	C	C	IC	IC	IC	C	C	C
Methyl Ethyl Ketone	C	C	LC	IC	LC	C	C	C
Isopropylacetone	C	C	IC	IC	C	C	ND	C
Methyl Isobutyl Ketone	ND	C	LC	IC	ND	C	LC	C
Miscellaneous								
Phenol Aqueous, 10%	ND	C	LC	IC	IC	IC	C	C
Formaldehyde Aqueous, 30%	C	C	C	C	C	LC	C	C
Hydrogen Peroxide, 30%	C	C	ND	ND	C	C	ND	ND
Silicone Oil & Mineral Oil	ND	C	C	C	C	C	C	C

- ◆ Use the information in this table to determine the ability of a specific syringe filter membrane to withstand exposure to a solvent.
- ◆ All concentrations are 100% unless noted.

LEGEND

C = Compatible

LC = Limited Compatibility (Membrane may swell and shrink)

IC = Incompatible (Not Recommended)

ND = No Compatibility Data Currently Available

Ion Chromatography (IC) Syringe Filters

PES Syringe Filters are suitable for the sample preparation of ion chromatography.

PES Syringe Filters are available in two pore sizes (0.22 µm & 0.45 µm) and two diameters (13mm & 25mm).

Choose a filter or membrane based on:

1. Chemical compatibility of the membrane and housing with your sample matrix.
2. Size and amount of particulates in the sample.
3. Potential interactions (binding) between the membrane and sample components.
4. Special considerations such as requirement for prefilter or inorganic ion certification.

Syringe Filter Housings

- ◆ Syringe filter housings are manufactured from solvent-resistant, low-extractable polypropylene resins specifically selected for wide compatibility with common HPLC sample matrices.
- ◆ Syringe filters can be sterilized by autoclave at 125°C for 15 minutes.
- ◆ The inlet connection is an enhanced female Luer-Lok fitting designed for extra security when attached to a Luer-Lok syringe.
- ◆ The outlet fitting is a standard size male Luer-slip fitting for ease of filtrate collection.