

# Thomson SINGLE StEP® Filter Vials Solvent Compatibility Chart



Solvent / Mobile Phase	HOUSINGS		FILTERS		
	PP (polypropylene)	PTFE (polytetrafluoroethylene)	PVDF (polyvinylidene fluoride)	PES (polyether sulfone)	NYL (nylon)
Acetic Acid (glacial) <i>acid, organic</i>	L	R	R	R	N
Acetone <i>ketone</i>	R	R	N	N	R
Acetonitrile (ACN) <i>nitrile</i>	R	R	L	N	R
Alconox, 1% <i>surfactant/detergent</i>	L	L	L	L	L
Ammonium Hydroxide <i>caustic</i>	L	R	R	N	L
Ammonium Sulfate (saturated) <i>salt, aqueous solution</i>	R	R	N	L	R
Amyl Acetate <i>ester</i>	L	R	R	R	L
Amyl Alcohol <i>alcohol</i>	R	R	R	R	L
Benzene <i>HC, aromatic</i>	N	R	R	N	R
Benzyl Alcohol <i>HC aromatic/alcohol</i>	N	R	R	L	L
Boric Acid (aqueous solution) <i>acid, inorganic</i>	R	R	L	R	R
Butyl Acetate <i>ester</i>	L	R	L	N	R
Butyl Alcohol <i>alcohol</i>	R	R	R	R	R
Carbon Tetrachloride <i>HC, halogenated</i>	N	R	R	N	L
Cellosolve (ethyl) <i>glycol ether</i>	R	R	L	R	R
CHAPS (aqueous solution) <i>surfactant/detergent</i>	L	L	L	L	L
Chloroform <i>HC, halogenated</i>	N	R	R	N	N
Cyclohexanone <i>ketone</i>	N	R	N	N	R
Diethyl Pyrocarbonate, 0.2% <i>carboxylic anhydride</i>	L	L	L	L	L
Dimethyl Sulfoxide (DMSO) <i>sulfoxide</i>	R	R	N	N	R
Dimethylacetamide <i>amide</i>	R	R	N	N	N
Dimethylformamide <i>amide</i>	R	R	N	L	R
Dioxane <i>ether</i>	R	R	R	L	R
Ethers <i>ether</i>	N	R	R	L	R
Ethyl Acetate <i>ester</i>	L	R	R	N	R
Ethyl Alcohol <i>alcohol</i>	R	R	R	R	L
Ethylene Glycol <i>glycol</i>	R	R	R	R	R

Solvent / Mobile Phase	HOUSINGS		FILTERS		
	PP (polypropylene)	PTFE (polytetrafluoroethylene)	PVDF (polyvinylidene fluoride)	PES (polyether sulfone)	NYL (nylon)
Formaldehyde <i>aldehyde</i>	R	R	R	L	R
Formic Acid, 50% <i>acid, organic</i>	R	R	R	L	N
Freon® (TF or PCA) <i>HC, halogenated</i>	R	R	R	L	R
Gasoline <i>HC</i>	N	R	R	R	R
Glycerine (Glycerol) <i>glycol</i>	R	R	R	R	R
Guanidine Hydrochloride, 6M <i>salt, aqueous solution</i>	L	R	L	L	L
Guanidine Thiocyanate, 5M <i>salt, aqueous solution</i>	L	R	L	L	L
Helium <i>gas</i>	R	R	L	L	R
Hexane <i>HC, aliphatic</i>	N	R	R	R	R
Hydrochloric Acid, 1N (HCL) <i>acid, inorganic</i>	R	R	R	R	R
Hydrochloric Acid, 6N (HCL) <i>acid, inorganic</i>	L	R	L	R	L
Hydrochloric Acid, conc. (HCL) <i>acid, inorganic</i>	N	R	N	L	N
Hydrofluoric Acid <i>acid, inorganic</i>	N	R	N	N	N
Hydrogen <i>gas</i>	R	R	R	L	R
Hydrogen Peroxide, 3% <i>peroxide</i>	R	R	R	L	R
Hydrogen Peroxide, 30% <i>peroxide</i>	L	R	R	L	L
Hydrogen Peroxide, 90% <i>peroxide</i>	R	R	R	L	N
HYPO (aqueous solution) <i>salt, aqueous solution</i>	R	R	R	L	R
Isobutyl Alcohol <i>alcohol</i>	R	R	R	R	L
Isopropyl Acetate <i>ester</i>	L	R	R	N	R
Isopropyl Alcohol <i>alcohol</i>	R	R	R	R	L

R = Recommended. No significant change observed in flow rate or bubble point of the membrane, nor 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 be unstable.

- = Insufficient Data. Information is not available. Trial testing is recommended.

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Kerosene <i>HC</i>	L	L	R	R	R
Lactic Acid, 50% <i>acid, organic/alcohol</i>	R	R	L	L	L
Lubrol PX (aqueous solution) <i>surfactant/detergent</i>	L	L	L	L	L
Methyl Ethyl Ketone (MEK) <i>ketone</i>	R	R	N	N	R
Mercaptoethanol, 0.1M <i>alcohol/mercaptan</i>	L	L	L	L	L
Methyl Acetate <i>ester</i>	L	R	N	N	R
Methyl Alcohol <i>alcohol</i>	R	R	R	R	L
Methylene Chloride <i>HC, halogenated</i>	N	R	N	N	L
Methyl Isobutyl Ketone (MIBK) <i>ketone</i>	N	R	N	N	R
Mineral Spirits <i>HC</i>	N	R	R	R	R
Nitric Acid, 6N <i>acid, inorganic</i>	L	R	R	R	N
Nitric Acid (concentrated) <i>acid, inorganic</i>	N	L	N	L	N
Nitrobenzene <i>HC, aromatic</i>	N	R	R	L	R
Nitrogen <i>gas</i>	L	R	R	L	R
Nonidet-P40 (aqueous solution) <i>surfactant/detergent</i>	L	L	L	L	L
Ozone <i>gas</i>	N	R	R	L	N
Paraldehyde <i>aldehyde</i>	L	R	L	L	R
Pentane <i>HC, aliphatic</i>	N	R	R	R	R
Petroleum Ether <i>ether</i>	L	R	R	L	R
Phenol (aqueous solution) <i>phenol</i>	N	R	R	L	N
Potassium Hydroxide, 3N <i>caustic</i>	R	R	R	L	R
Pyridine <i>amine</i>	R	R	N	N	L
Silicone Oils <i>silicone</i>	R	R	R	L	R

Solvent / Mobile Phase	HOUSINGS		FILTERS		
	PP (polypropylene)	PTFE (polytetrafluoroethylene)	PVDF (polyvinylidene fluoride)	PES (polyether sulfone)	NYL (nylon)
Sodium Carbonate (aqueous solution) <i>salt, aqueous solution</i>	R	R	R	L	L
Sodium Chloride (aqueous solution) <i>salt, aqueous solution</i>	R	R	R	L	R
Sodium Dodecyl Sulfate <i>surfactant/detergent</i>	L	L	L	L	L
Sodium Hydroxide, 3N <i>caustic</i>	R	R	R	R	R
Sodium Hydroxide (concentrated) <i>caustic</i>	R	R	R	R	N
Sulfuric Acid (concentrated) <i>acid, inorganic</i>	N	R	L	N	N
TCA (aqueous solution) <i>acid, organic</i>	R	R	R	L	L
Tetrahydrofuran (THF) <i>ether</i>	N	R	N	L	R
Toluene <i>HC, aromatic</i>	N	R	R	R	R
Trichloroethane <i>HC, halogenated</i>	N	R	L	N	L
Trichloroethylene <i>HC, halogenated</i>	N	R	R	N	L
Tween 20 (aqueous solution) <i>surfactant/detergent</i>	L	R	L	L	L
Urea, 8M <i>salt, aqueous solution</i>	R	R	R	L	R
Water (Brine) <i>salt, aqueous solution</i>	R	R	R	L	R
Xylene <i>HC, aromatic</i>	N	R	R	L	R

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