SARTORIUS

Chemical Resistance

Sartorius Prospenser Plus, Prospenser, and Biotrate Bottle-top Devices

The chemical resistance presented in this document is based on information provided by the manufacturer of the raw materials. The resistance data has been ascertained at a temperature of 20 °C. This table is a general guide, and it is not a guarantee of chemical combatibility. Chemical resistance can be affected by concentration, temperature, and period of exposure. Information provided by the chemical manufacturer should be checked, and new information given takes priority in all cases. The device's user manual provides information on the materials used in its manufacture. The user is responsible for ensuring the chemical compatibility before use. Crystallized liquids might damage the devices. To avoid crystallization, reduce the time the devices are primed, and clean as needed.

Reagent	Product Concentration (%)	Prospenser Plus	Prospenser	Biotrate	Comments
Acetaldehyde	100	■	■	■	Note flash point
Acetamide	saturated	■	■	■	
Acetic acid	100	■	■	■	
Acetic acid, glacial	100	■	■	■	Note melting point
Acetic anhydride	100	■	■	■	
Acetone	100	■	■	■	Note flash point
Acetonitirile	100	■	■	■	Note vapor pressure and flash point
Acetophenone	-	■	■	■	Note flash point
Acetyl chloride	-	■	■	■	Note flash point
Acetylsalicylic acid	100	■	■	■	
Acrylic acid	-	■	■	■	
Acrylonitrile	100	■	■	■	Note flash point
Adipic acid	saturated	■	■	■	
Alanine	-	■	■	■	
Alcoholics	all	■	■	■	Note flash point
Allyl acetate	100	■	■	■	Note flash point
Allyl alcohol	100	■	■	■	
Allyl isothiocyanate	100	■	■	■	
Aluminium chloride	saturated	■	■	■	
Aluminium fluoride	aqueous	■	■	■	
Aluminium nitrate	aqueous	■	■	■	
Aluminium sulfate	saturated	■	■	■	
Amino acids	-	■	■	■	
Ammonia	26	■	■	■	Ceramic valves recommended
Ammonium acetate	saturated	■	■	■	
Ammonium alum	saturated	■	■	■	
Ammonium carbonate	50	■	■	■	
Ammonium chloride	aqueous	■	■	■	
Ammonium nitrate	saturated	■	■	■	
Ammonium oxalate	-	■	■	■	
Ammonium sulfate	solved	■	■	■	
Ammonium sulfide	saturated	■	■	■	
Amyl alcohol	-	■	■	■	Note flash point
Amyl chloride	-	■	■	■	
Aniline	100	■	■	■	

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x No chemical resistance
? Information not available

Reagent	Product Concentration (%)	Prospenser Plus	Prospenser	Biotrate	Comments
Apple juice	100	■	■	■	Only without pulp (pulp might block valves)
Arsenic acid	aqueous	■	■	■	
Ascorbic acid	100	■	■	■	
Barium bromide	-	■	■	■	
Barium chloride	saturated	■	■	■	
Barium sulfide	saturated	■	■	■	
Battery acid	38	■	■	■	
Beer	100	■	■	■	
Benzaldehyde	-	■	■	■	
Benzene	-	■	■	■	Note flash point
Benzene slufonic acid	saturated	■	■	■	
Benzoic acid	saturated	■	■	■	
Benzoyl chloride	100	■	■	■	
Benzyl chloride	100	■	■	■	
Bitter almond oil	100	■	■	■	
Boric acid	10	■	■	■	
Brine	saturated	■	■	■	Note crystallization (see user manual for cleaning)
Bromine	100	■	■	■	Pt-Ir springs required (spare part)
Butanetriol	100	■	■	■	
Butyl acetate	100	■	■	■	
Butyl alcohol	100	■	■	■	
Butyl amine	-	■	■	■	
Butyl glycol	100	■	■	■	
Butyl methyl ether	-	■	■	■	Note flash point
Butyl phenol	100	■	■	■	
Butyl phenol, p-tert	100	■	■	■	
Butylene glycole	100	■	■	■	
Butyric acid	100	■	■	■	
Calcium acetate	aqueous	■	■	■	
Calcium bicarbonate	saturated	■	■	■	Note crystallization (see user manual for cleaning)
Calcium bisulfite	saturated	■	■	■	
Calcium bromide	-	?	?	?	
Calcium carbonate	saturated	■	■	■	
Calcium chlorate	saturated	■	■	■	
Calcium chloride	aqueous	■	■	■	
Calcium hydroxide	concentrated	■	■	■	
Calcium hypochloride	saturated	■	■	■	
Calcium nitrate	50	■	■	■	
Carbon disulfide	-	■	■	■	Note flash point
Cetyl alcohol	100	■	■	■	
Chloroacetic acid	50	■	■	■	
Chlorobenzene	-	■	■	■	
Chlorobutane	100	■	■	■	Note flash point
Chloroethane	100	■	■	■	Note flash and boiling points
Chloroethanole	100	■	■	■	
Chloroform	100	■	■	■	Note vapor pressure
Chlorosulfonic acid	-	■	■	■	
Chrom alum	saturated	■	■	■	
Chromic acid	50	x	x	x	
Chromosulfuric acid	concentrated	x	x	x	
Citric acid	saturated	■	■	■	
Citric juice	100	■	■	■	
Cresoles	-	■	■	■	
Cyclohexane	100	■	■	■	Note flash point
Cyclohexanole	100	■	■	■	
Cyclohexanone	100	■	■	■	Note flash point
Cyclopentane	-	■	■	■	Note flash point
Decane	100	■	■	■	Note flash point

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Dehydracetic acid	-	■	■	■	Might generate insoluble salts
Detergents	-	■	■	■	
Diacetone alcohol	-	■	■	■	
Dibutylphtalate	-	■	■	■	
Dichlorbenzene	-	■	■	■	
Dichloroaceticacid	-	x	x	x	
Dichlorodifluoromethane	100	x	x	x	
Dichloroethane	-	■	■	■	Note vapor pressure and flash point
Dichloromethane	100	■	■	■	Note vapor pressure and flash point
Diethyl ether	100	■	■	■	Note flash point
Diethyl ketone	-	■	■	■	Note flash point
Diethylene glycol	100	■	■	■	
Dimethyl formamide	100	■	■	■	Note vapor pressure and flash point
Dimethylaniline	-	■	■	■	
Dioxane	100	■	■	■	Note flash point
Ddobromoethane-1,2	-	■	■	■	
Ethyl acetate	100	■	■	■	
Ethyl alcohol, ethanol	100	■	■	■	Note flash point
Ethyl benzene	100	■	■	■	Note flash point
Ethyl hexanol 1-	-	■	■	■	
Ethylene diamin	100	■	■	■	Note flash point
Ethylene glycol	100	■	■	■	
Ethylenediaminetetraacetic acid (EDTA)	-	■	■	■	
Ferric/ferrous chlorides	saturated	■	■	■	
Ferric/ferrous nitrates	saturated	■	■	■	
Ferric/ferrous sulfates	saturated	■	■	■	
Fluorisilicic acid	32	■	■	■	
Formaldehyde	40	■	■	■	Note vapor pressure and boiling point
Formic acid	100	■	■	■	
Fructose	saturated	■	■	■	
Fruit juice	100	■	■	■	Only without pulp, pulp might block valves
Fas oil	-	■	■	■	
Felatine	all	■	■	■	
Glucose	saturated	■	■	■	
Glycerol	100	■	■	■	Note viscosity
Glycine	10	■	■	■	
Gglycolic acid	50	x	x	x	
Hdrogene peroxide	90	■	■	■	Pt-Ir springs required (spare part)
Heptane	100	■	■	■	Note flash point
Heptanol ,1-	-	■	■	■	
Heptanone	-	■	■	■	Note flash point
Hexane	100	■	■	■	Note flash point
Hexyl alcohol	100	■	■	■	Note flash point
Hydrobromic acid	50	■	■	■	Pt-Ir springs required (spare part)
Hydrochloric acid	37	■	■	■	Avoid variations in temperature, for trace analysis Pt-Ir springs recommended (spare part)
Hydrofluoric acid	50	x	x	x	
Hydrogen sulfide	saturated	■	■	■	
Isoamylalcohol	-	■	■	■	Note flash point
Isobutylalcohol	100	■	■	■	Note flash point
Isooctane	100	■	■	■	Note flash point
Isopropylacetate	100	■	■	■	Note flash point
Isopropylether	100	■	■	■	Note flash point
Kerosene	100	■	■	■	
Kerosine	100	■	■	■	Note flash point
Kactic acid	85	■	■	■	
Lactose	aqueous	■	■	■	

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Magnesium carbonate	saturated	■	■	■	
Magnesium chloride	aqueous	■	■	■	
Magnesium hydroxide	saturated	■	■	■	
Magnesium nitrate	saturated	■	■	■	
Magnesium sulfate	saturated	■	■	■	
Maleic acid	aqueous	■	■	■	Pt-Ir springs required (spare part)
Mercury(II)-chloride	saturated	■	■	■	
Mercury(II)-cyanide	saturated	■	■	■	
Mercurynitrate	100	■	■	■	
Methane	100	■	■	■	
Methyl acetate	100	■	■	■	Note vapor pressure and flash point
Methyl alcohol	-	■	■	■	Note flash and boiling points
Methyl formate	-	■	■	■	Note flash point
Methylethylketone (MEK)	-	■	■	■	Note flash point
Methylpropylketone	-	■	■	■	Note flash point
Mineral water	100	■	■	■	
Naphta	100	■	■	■	Note flash point
Nickel chloride	saturated	■	■	■	
Nickel nitrate	saturated	■	■	■	
Nickel sulfate	saturated	■	■	■	Pt-Ir springs required (spare part)
Nitirlitriethanole	100	■	■	■	
Nitric acid	70	■	■	■	Avoid variations in temperature, Pt-Ir springs recommended (spare part)
Nitrobenzene	100	■	■	■	Pt-Ir springs required (spare part)
Nitrohydrochloric acid (aqua regia)	-	■	■	■	Pt-Ir springs required (spare part)
Octane	100	■	■	■	Note flash point
Orange juice	100	■	■	■	Only without pulp, pulp might block valves
Oxalic acid	aqueous	x	x	x	
Oxygen	100	■	■	■	
Pentane	100	■	■	■	Note flash and boiling points
Petrol, gas	-	■	■	■	Note flash point
Phosphoric acid	85	■	■	■	
Phosphorus trichloride	-	■	■	■	
Phthalic acid	saturated	■	■	■	
Pineapple juice	-	■	■	■	Only without pulp (pulp might block valves)
Potash lye	concentrated	■	■	■	Note crystallization (see user manual for cleaning), ceramic valves recommended (spare part)
Potassium acetate	aqueous	■	■	■	
Potassium aluminium sulfate	saturated	■	■	■	
Potassium bromide	all	■	■	■	
Potassium carbonate	saturated	■	■	■	
Potassium chlorate	saturated	■	■	■	
Potassium chloride	aqueous	■	■	■	
Potassium chromate	saturated	x	x	■	
Potassium cyanide	saturated	■	■	■	
Potassium dichromate	aqueous	■	■	■	
Potassium iodide	saturated	■	■	■	
Potassium nitrate	50	■	■	■	
Potassium perchlorate	saturated	■	■	■	
Potassium permanganate	aqueous	■	■	■	
Potassium sulfate	aqueous	■	■	■	
Potassium sulfide	solved	■	■	■	
Potassium sulfite	saturated	■	■	■	
Potassium thiosulfate	solved	■	■	■	
Propyl alcohol	100	■	■	■	Note flash point
Propyl alcohol, 2-	100	■	■	■	Note flash point

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Propylene oxide	-	x	x	x	Note flash point
Pyridine	100	■	■	■	Note flash point
Salicylic acid	saturated	■	■	■	
Sea water	-	■	■	■	Note crystallization (see user manual for cleaning)
Silicone oil	-	■	■	■	Note viscosity
Silver nitrate	solved	■	■	■	Note crystallization (see user manual for cleaning)
Soap solution	all	■	■	■	
Sodium acetate	all	■	■	■	
Sodium chloride	all	■	■	■	Note crystallization (see user manual for cleaning)
Sodium disulfate	solved	■	■	■	Note crystallization (see user manual for cleaning)
Sodium fluoride	saturated	■	■	■	
Sodium hydroxide	50	■	■	■	Note crystallization (see user manual for cleaning), ceramic valves recommended (spare part)
Sodium hypochlorite	15	■	■	■	
Sodium nitrate	saturated	■	■	■	
Sodium nitrite	saturated	■	■	■	
Sodium phosphate	saturated	■	■	■	
Sodium silicates	all	■	■	■	
Sodium sulfate	saturated	■	■	■	
Sodium sulfide	saturated	■	■	■	
Sodium sulfite	1-molar	■	■	■	
Sodium thiosulfate	solved	■	■	■	
Soja oil	100	■	■	■	
Spirits	100	■	■	■	Note flash point
Stannic chloride	aqueous	■	■	■	Pt-Ir springs required (spare part)
Stannous chloride	saturated	■	■	■	Pt-Ir springs required (spare part)
Starch solution	all	■	■	■	
Succinic acid	saturated	■	■	■	
Sugar beet juice	100	■	■	■	
Sulfuorous acid	saturated	■	■	■	Pt-Ir springs required (spare part)
Sulfur chloride	-	■	■	■	Pt-Ir springs required (spare part)
Sulfuric acid	98	■	■	■	
Szintillators	-	■	■	■	
Tartaric acid	-	■	■	■	Pt-Ir springs required (spare part)
Terachloromethane	100	■	■	■	
Tetrachloroethane	100	x	x	x	
Tetrahydrofuran	100	■	■	■	Note boiling and flash points
Toluene	-	■	■	■	Note flash point
Trichlorethylene	100	■	■	■	
Trichloroacetic acid	-	■	■	■	
Trichloroethane	100	■	■	■	
Trifluoro acetic acid	-	■	■	■	Note vapor pressure
Trifluorotrichloroethane	100	■	■	■	Note vapor pressure
Turpentine	100	■	■	■	Note flash point
Urea	saturated	■	■	■	
Uric acid	-	■	■	■	
Urine	-	■	■	■	
Washing agents	100	■	■	■	
Water	-	■	■	■	
Water-glass	saturated	■	■	■	
Xylene	-	■	■	■	Note flash point
Zinc chloride	10	■	■	■	
Zinc sulfate	solved	■	■	■	
Zinc bromide	-	■	■	■	

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