Technical support information

Chemical resistance of Socorex® Ecostep™ syringe

Ecostep™ are syringe fitting the repeater pipette Stepper™ 411 and 416. Manufactured and tested under stringent conditions, they meet high quality standards for safe distribution and reproductible results.

Materials

Ecostep™ syringes are in direct contact with the liquid. Special attention was paid to provide excellent chemical compatibility.

Parts	Ecostep™
Syringe plunger	PE - Polyethylene HD
Syringe cylinder	PP - Polypropylene Copolymer with slip agent

Chemicals from A to Z

The following list includes most frequently used chemicals. It provides useful information for the safe and adequate use of Ecostep™ syringe. Read the safety precautions and recommendations in operating instructions. Compatibility for special applications such as trace material analysis, etc. should be checked by the user.

Code explanations

A = Good resistance
B = Acceptable with limitations. Chemical and/or slip agent degradation, risk of tightness / plunger blockage. May require more frequent syringe replacement during work.
C = Not recommended

Conditions:

- Single usage
- Ambient temperature = 20 – 25° Celsius
- Chemical resistance/performance may vary depending on reagent concentration
- Compatibility only valid for the Ecostep™ syringe

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Chemicals A - Z	Ecostep™
A	
Acetaldehyde (Ethanal)	B
Acetic acid 96%	A
Acetic acid 100% (glacial)	A
Acetic anhydride	A
Acetone (Propanone)	B
Acetonitrile (MECN)	A
Acetophenone	A
Acetyl Chloride	A
Acetylacetone	B
Acrylic acid	A
Acrylonitrile	A
Adipic acid	A
Allyl alcohol	A
Aluminum chloride	A
Amino acids	A
Ammonia 20%	A
Ammonia 20-30%	A
Ammonium chloride	A
Ammonium fluoride	A
Ammonium molybdate	B
Ammonium sulfate	A
Amyl alcohol (Pentanol)	A
Amyl chloride (Chloropentane)	C
Aniline	A
Ascorbic acid	A
n-Amyl acetate	B
B	
Barium chloride	A
Benzaldehyde	A
Benzene	C
Benzine	B
Benzoyl chloride	C
Benzyl alcohol	A
Benzyl chloride	B
Bis(2-ethylhexyl) phthalate	A
Boric acid 10%	A
Bromine	C
Bromobenzene	C
Bromonaphtalene	B
Butanediol	A
Butanol	A
Butanone (MEK)	B
Butyl acetate	B
Butyl methyl ether	B
Butylamine	C
Butyric acid	A

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Chemicals A - Z	Ecostep™
C	
Calcium carbonate	A
Calcium chloride	A
Calcium hydroxide	A
Calcium hypochlorite	A
Carbon disulfide	B
Carbon tetrachloride	C
Chlorine dioxide	B
Chloronaphthalene	C
Chloroacetaldehyde 45%	B
Chloroacetic acid	B
Chloroacetone	C
Chlorobenzene	C
Chlorobutane	C
Chloroethanol	A
Chloroform	C
Chlorosulfuric acid	C
Chlorosulfuric acid 100%	C
Chromic acid 100%	B
Chromosulfuric acid 100%	C
Citric acid	A
Copper fluoride	A
Copper sulfate	A
Cresol	A
Cumene (Isopropylbenzene)	B
Cyanoacrylate	C
Cyclohexane	C
Cyclohexanone	B
Cyclopentane	C
D	
1,2-Diethylbenzene	C
1,4-Dioxane (Diethylene dioxide)	C
1-Decanol	A
Decane	B
Di-(2-ethylhexyl) peroxydicarbonate	C
Dibenzyl ether	B
Dichloroacetic acid	B
Dichlorobenzene	B
Dichloroethane	B
Dichloroethylene	B
Diesel oil (Heating oil)	B
Diethanolamine	A
Diethylamine	B
Diethylene glycol	A
Diethylether	B
Dimethyl sulfoxide (DMSO)	C
Dimethylaniline	A
Dimethylformamide (DMF)	A
Diphenyl ether	B

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Chemicals A - Z	Ecostep™
E	
Ethanol	A
Ethanolamine	A
Ether	C
Ethyl acetate	B
Ethylbenzene	C
Ethylene chloride	B
Ethylene diamine	A
Ethylene glycol	A
F	
Fluoroacetic acid	B
Formaldehyde (Formalin)	A
Formamide	A
Formic acid	A
G	
Gamma-butyrolactone	C
Gasoline	C
Glycerin <40%	A
Glycolic acid 50%	A
H	
Heating oil (Diesel oil)	B
Heptane	C
Hexane	C
Hexanoic acid	B
Hexanol	A
Hydriodic acid	C
Hydrobromic acid	A
Hydrochloric acid 20% (HCI)	A
Hydrochloric acid 37% (HCI)	A
Hydrofluoric acid (HF)	A
Hydrogen peroxide 30%	B
I	
Iodine	A
Iodine bromide	C
Iodine chloride	C
Isoamyl alcohol	B
Isobutanol	A
Isooctane	C
Isopropanol	A
Isopropyl ether	B
Isopropylamine	A
L	
Lactic acid	A
M	
2-Methoxyethanol	A
Methanol	A
Methoxybenzene (Anisol)	B
Methyl benzoate	A
Methyl chloride (Chloromethane)	C
Methyl formate	B

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Chemicals A - Z	Ecostep™
M	
Methyl iodide (Iodomethane)	B
Methyl methacrylate (MMA)	C
Methyl propyl ketone (2-Pentanone)	B
Methyl tert-butyl ether (MTBE)	B
Methylene chloride (Dichloromethane) (DCM)	C
Methylpentanone	B
N	
N-Butylamine	C
Nitric acid 100%	C
Nitric acid 30-70%	C
Nitric acid dil. <30%	B
Nitro-hydrochloric acid (Aqua regal)	B
Nitrobenzene	A
Nitromethane	B
N-methyl-2-pyrrolidone (NMP)	A
O	
Octane	B
Octanol	C
Oil (engine oil)	B
Oil (vegetable, animal)	C
Oil of turpentine	C
Oleic acid	A
Oxalic acid	A
P	
Pentane	C
Peracetic acid	C
Perchloric acid 100%	A
Perchloric acid diluted	A
Perchloroethylene	C
Petroleum	C
Petroleum ether / spirit	C
Phenol	B
Phenylethanol	B
Phenylhydrazine	B
Phosphoric acid 100%	A
Phosphoric acid 85%	A
Piperidine	A
Potassium chloride	A
Potassium dichromate	A
Potassium hydroxide	A
Potassium iodide	A
Potassium permanganate	A
Potassium peroxydisulfate (persulfate)	A
Potassium sulfate	A
Propionic acid (Propanoic acid)	A
Propylene glycol (Propane-1,2-diol)	A
Propylene oxide	A
Pyric acid (Trinitrophenol)	A
Pyridine	B

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Chemicals A - Z	Ecostep™
P	
Pyruvic acid	A
R	
Resorcin	A
S	
Salicylaldehyde	A
Silver acetate	A
Silver nitrate	A
Sodium acetate	A
Sodium chloride (kitchen salt)	A
Sodium dichromate	A
Sodium fluoride	A
Sodium hydroxide 30%	A
Sodium hypochlorite	A
Sodium thiosulfate	A
Sulfonitric acid 100%	C
Sulfur dioxide	A
Sulfuric acid 98%	B
T	
Trichlortrifluoroethane	C
Tartaric acid	A
Tetrachlorethylene	C
Tetrahydrofuran (THF)	C
Tetramethylammonium hydroxide	C
Toluene	C
Trichlorethylene	C
Trichloroacetic acid 10%	A
Trichlorobenzene	C
Trichloroethane	C
Trichloromethane (Chloroform)	B
Triethanolamine	A
Triethylene glycol	A
Trifluoroacetic anhydride (TFAA)	B
Trifluoromethane (Fluoroform)	C
U	
Urea	A
X	
Xylene	C
Z	
Zinc chloride 10%	A
Zinc sulfate 10%	A

The above guidelines have been carefully reviewed prior to publication. Should you require information on chemicals not listed or contribute to some comments, please feel free to contact us.

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