Chemical Resistance

Sartorius Pipette Tips, Tip Filters and Safe-Cone Filters

The chemical resistance is based on information provided by the manufacturer of the raw material. This table is for general guidance and does not guarantee the performance. The chemical resistance can be affected by concentration, temperature and length of exposure. The polypropylene (PP) products, including trays, racks and non-filtered tips are resistant to conditions used in standard autoclaving procedure: 121°C, 20 min, 1 bar/100 kPa.

Product	Material
Optifit Tips	PP
SafetySpace Filter Tips	PP (tip), PE (filter)
Safe-Cone Filters	PE

PP=polypropylene, PE=polyethylene

	Material	PP		PE
	Temperature	20°C	60°C	20°C
Reagent				
Acetaldehyde		0		+
Acetic acid 50% (20%)		+	+	+
Acetic anhydride		+		+
Acetone		+	+	+
Acetonitrile		+		+
Adipic acid		+	+	+
Allyl Alcohol		+	+	+
Aluminium chloride		+	+	+
Aluminium hydroxide		+		+
Amino acids		+	+	+
Ammonia		+	+	+
Ammonium chloride		+	+	+
Ammonium hydroxide 30% (10%)		+	+	+
n-Amyl acetate		0	-	+
Amyl alcohol		+	+	+
Aniline		+	+	+
Anisole		0		0
Aqua regia		0	-	-
Benzaldehyde		+		+
Benzene		0	-	0
Benzyl alcohol		+	0	+
Boric acid		+	+	+
Bromine		-		-
n-Butyl acetate		0	-	+
n-Butyl alcohol		+		+
Calcium chloride		+	+	+
Calcium hypochlorite		+	+	+
Carbon disulphide		0		0
Carbon tetrachloride		-		-
Chlorine, (liquid)		-		-
Chloroacetic acid 85%		+		+
Chlorobenzene		0	-	0
Chloroform		0	-	-
Chlorosulphonic acid		-		-
Chromic acid 10%		+	0	+
Chromic acid 80%		0	-	+
Citric acid		+	+	+
Copper salts		+	+	+
Decahydronaphtalene		0	-	
Dibutylphtalate		+		+
Dichlorobenzene		0		0

	Material	PP		PE
	Temperature	20°C	60°C	20°C
Reagent				
Diethyl ether		0		0
Dimethylformamide (DMF)		+		+
Dimethyl sulphoxide (DMSO)		+		+
1,4-dioxan		0	0	+
Ethanol 100%		+		+
Ethers		-	-	0
Ethyl acetate		0	0	+
Ethylene chloride		0		0
Ethylene glycol		+	+	+
Fluorine		-		-
Formaldehyde 40%		+	+	+
Formic acid 98-100%		+	0	+
Glycerol		+	+	+
Glycol		+	+	+
n-Hexane		0	0	+
Hydrochloric acid 36%		+	+	+
Hydrofluoric acid 40%		+	+	+
Hydrofluoric acid 70%		+	0	+
Hydrogen peroxide 30%		+	0	+
iso-Butyl alcohol		+	+	+
Isooctane		0	0	+
Isopropanol		+	+	+
Isopropyl ether		0	-	0
Lactic acid		+	+	+
Mercury salts		+	+	+
Mercury		+	+	+
Methanol		+	+	+
Methyl ethyl ketone		+	0	+
Methylene chloride		0		0
Naphthaline		+		+
Nitric acid 10%		+	+	+
Nitric acid 50%		0	-	0
Nitric acid 70%		-	-	0
Nitrobenzene		+	0	+
Oxalic acid		+	0	+
Ozone		+	0	0
Perchloric acid 10%		+	+	+
Perchloroethylene (tetrachloroethylene)		0	-	-
Petroleum		0	0	+
Phenol 100%		+	+	+
Phosphoric acid 85% (20%)		+	+	+

	Material	PP		PE
	Temperature	20°C	60°C	20°C
Reagent				
Phthalic acid 50%		+	+	+
Potassium chloride		+	+	+
Potassium hydroxide (30%)		+	+	+
Potassium permanganate		+	+	+
Propionic acid		+	+	+
Propylene glycol		+	+	+
Pyridine		0	0	+
Silver nitrate		+	+	+
Sodium acetate		+	+	+
Sodium chloride (common salt, saturated)		+	+	+
Sodium hydroxide (30%)		+	+	+
Sulphuric acid 60%		+	+	+
Sulphuric acid 98%		-	-	0
Tartaric acid		+	+	+
Tetrachloroethane		0	-	0
Tetrahydrofuran		0	-	-
Toluene		0	-	-
Trichloroethane		0	-	
Trichloroethylene		0	-	-
Urea		+	+	+
Vinylidene chloride (1,1-dichloroethylene)		0		-
Xylene		0	-	0
Zinc chloride 10%		+	+	0
Zinc sulphate 10%		+	+	

The symbols indicate the chemical resistance as follows:
+ Excellent chemical resistance
0 Limited chemical resistance, only for short exposure. Tests should be carried out to confirm suitability in critical cases.
- No chemical resistance

Sartorius Biohit Liquid Handling Oy
Laippatie 1
00880 Helsinki, Finland

Phone +358 9 755 951

Sartorius Lab Instruments
GmbH & Co. KG
Weender Landstrasse 94-108
37075 Goettingen, Germany

Phone +49 551 3080
Fax +49 551 308 3289

www.sartorius.com