Chemical Resistance Table
High Density Polyethylene And Polypropylene

The table below may be used as a guideline for evaluation of chemical resistance of high density polyethylene (HDPE) and polypropylene (PP), not subjected to mechanical stress, to various fluid at 20 ºC, 60 ºC and 100ºC.

Source: Borouge (www.borouge.com) and other web-site data.

Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Acetaldehyde	100%	S	L	L	-	-
Acetanilide	-	S	S	-	-	-
Acetic acid	10%	S	S	S	S	S
Acetic acid	Up to 40%	S	-	S	S	-
Acetic acid	50%	S	-	S	S	L
Acetic acid	60%	S	S	-	-	-
Acetic acid, glacial	Greater than 96%	S	L	S	L	NS
Acetic anhydride	100%	S	L	S	-	-
Acetone	100%	L	L	S	S	-
Acetophenone	100%	S	S	S	L	-
Acetylsalicylic acid	-	S	S	-	-	-
Acrylonitrile	100%	S	S	S	-	-
Adipic acid	Sat. sol	S	S	S	S	-
Air		S	S	S	S	S
Aliphatic hydrocarbons	-	L	L	NS	NS	NS
Allyl acetate	-	S	L	-	-	-
Allyl alcohol	100%	S	S	S	S	-
Allyl chloride	-	L	NS	-	-	-
Almond oil	-	-	-	S	-	-
Aluminium chloride	-	S	S	S	S	-
Aluminium fluoride	Sat. sol	S	S	S	S	-
Aluminium hydroxide	Sat. sol	S	S	S	-	-
Aluminium nitrate	Sat. sol	S	S	S	S	-
Aluminium oxychloride	Sat. sol	S	S	S	S	-
Aluminium sulphate	Sat. sol	S	S	S	S	-
Aluminium/potassium sulphate	Sat. sol	S	S	S	S	-
Alums	Sol	S	S	S	S	-
Aminobenzoic acid	-	S	S	-	-	-
Ammonia aqueous	Sat. sol	S	S	S	S	-
Ammonia liquid	100%	S	S	S	-	-
Ammonia, dry gas	100%	S	S	S	-	-
Ammonium acetate	-	S	S	S	S	-
Ammonium carbonate	Sat. sol	S	S	S	S	-
Ammonium chloride	Sat. sol	S	S	S	S	-
Ammonium fluoride	Up to 20%	S	S	S	S	-
Ammonium hexafluorosilicate	Sat. sol	S	S			
Ammonium bicarbonate	Sat. sol	S	S	S	S	-
Ammonium hydroxide	10%	S	S	-	-	-
Ammonium hydroxide	30%	S	S	-	-	-
Ammonium metaphosphate	Sat. sol	S	S	S	S	S

S – satisfactory; L – limited; NS – not satisfactory

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Ammonium nitrate	Sat. sol	S	S	S	S	S
Ammonium oxalate	Sat. sol	S	S	-	-	-
Ammonium persulphate	Sat. sol	S	S	S	S	-
Ammonium phosphate	Sat. sol	S	S	S	-	-
Ammonium sulphate	Sat. sol	S	S	S	S	S
Ammonium sulphide	Sol	S	S	S	S	-
Ammonium thiocyanate	Sat. sol	S	S	S	S	-
Amyl acetate	100%	L	L	L	-	-
Amyl alcohol	100%	S	L	S	S	S
Amyl phthalate	-	S	L	-	-	-
Aniline	100%	S	L	S	S	-
Antimony (III) chloride	90%	S	S	-	-	-
Antimony (III) chloride	Sat. sol	S	S	S	S	-
Antimony trichloride	Sol	S	S	S	S	-
Apple juice	Sol	S	L	S	-	-
Aqua regia	HCl/HNO_3=3/1	NS	NS	NS	NS	NS
Aromatic hydrocarbons	-	NS	NS	NS	NS	NS
Arsenic acid	Sat. sol	S	S	S	S	-
Ascorbic acid	10%	S	S	S	S	-
Barium bromide	Sat. sol	S	S	S	S	S
Barium carbonate	Sat. sol	S	S	S	S	S
Barium chloride	Sat. sol	S	S	S	S	S
Barium hydroxide	Sat. sol	S	S	S	S	S
Barium sulphate	Sat. sol	S	S	S	S	S
Barium sulphide	Sat. sol	S	S	S	S	S
Beer	-	S	S	S	S	-
Benzaldehyde	100%	S	L	S	L	-
Benzene	100%	L	L	L	NS	NS
Benzenesulphonic acid	10%	S	S			
Benzoic acid	Sat. sol	S	S	S	S	-
Benzoyl chloride	-	S	L	L	-	-
Benzyl alcohol	100%	S	S	S	L	-
Bismuth carbonate	Sat. sol	S	S	S	S	-
Bitumen	-	S	S	S	L	-
Bleach lye	10%	S	S	-	-	-
Borax	Sat. sol	S	S	S	S	-
Boric acid	Sat. sol	S	S	S	-	-
Boron trifluoride	Sat. sol	L	NS	S	-	-
Brake fluid	-	L	NS	S	S	-
Brine	-	S	S	S	S	-
Bromine, dry gas	100%	NS	NS	NS	NS	NS
Bromine, liquid	100%	NS	NS	NS	NS	NS
Bromoform	100%	NS	NS	-	-	-
Butanediol	10%	S	S	-	-	-
Butanediol	60%	S	S	-	-	-
Butanediol	100%	S	S	-	-	-
Butane, gas	100%	S	S	S	-	-
Butanol	100%	S	S	S	L	L
Butter	-	S	S	S	S	-
Butyl acetate	100%	S	L	L	NS	NS
Butyl alcohol	100%	S	S	-	-	-
Butyl cloride	-	S	-	-	-	-
Butyl glycol	100%	-	-	S	-	-
Butyl phenols	Sat. sol	-	-	S	-	-
Butyl phthalate	100%	-	-	S	L	L

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Butylene glycol	10%	S	S	S	-	-
Butylene glycol	60%	S	S	S	-	-
Butylene glycol	100%	S	S	S	-	-
Butyraldehyde	-	S	L	-	-	-
Butyric acid	100%	S	L	-	-	-
Butyric acid	20%	-	-	S	-	-
Calcium arsenate	-	S	S	-	-	-
Calcium benzoate	-	S	S	-	-	-
Calcium bisulphide	-	S	S	-	-	-
Calcium bromate	10%	S	S	-	-	-
Calcium bromide	Sat. sol	S	S	-	-	-
Calcium carbonate	Sat. sol	S	S	S	S	S
Calcium chlorate	Sat. sol	S	S	S	S	-
Calcium chloride	Sat.sol	S	S	S	S	S
Calcium chromate	40%	S	S	-	-	-
Calcium cyanide	-	S	S	-	-	-
Calcium hydrosulphide	Sol	S	S	-	-	-
Calcium hydroxide	Sat. sol	S	S	S	S	S
Calcium hypochlorite	Sol	S	S	S	-	-
Calcium nitrate	Sat. sol	S	S	S	S	-
Calcium oxide	Sat. sol	S	S	-	-	-
Calcium perchlorate	1%	S	S	-	-	-
Calcium permanganate	20%	S	S	-	-	-
Calcium persulphate	Sol	S	S	-	-	-
Calcium sulphate	Sat. sol	S	S	S	S	-
Calcium sulphide	Dil. sol	L	L	-	-	-
Camphor oil	-	L	L	NS	NS	NS
Carbon dioxide, dry gas	-	S	S	S	S	-
Carbon dioxide, wet gas	-	S	S	S	S	-
Carbon disulphide	100%	L	NS	S	NS	NS
Carbon monoxide	100%	S	S	S	S	-
Carbon tetrachloride	100%	L	NS	NS	NS	NS
Carbonic acid		S	S	S	S	-
Castor oil	100%	S	S	S	S	-
Caustic soda	Up to 50%	S	S	S	L	L
Chlorine, water	2% sat. sol	S	S	-	-	-
Chlorine, aqueous	Sat. sol	L	NS	S	L	-
Chlorine, dry gas	100%	L	NS	NS	NS	NS
Chlorine, liquid	100%	-	-	NS	NS	NS
Chloroacetic acid	Sol	S	S	S	-	-
Chlorobenzene	100%	NS	NS	L	-	-
Chloroethanol	100%	S	S	S	-	-
Chloroform	100%	NS	NS	L	NS	NS
Chloromethane, gas	100%	L	-	-	-	-
Chlorosulphonic acid	100%	NS	NS	NS	NS	NS
Chloropropene	-	L	-	-	-	-
Chrome alum	Sol	S	S	S	S	-
Chromic acid	Up to 40%	S	L	S	L	NS
Chromic acid	50%	S	L	-	-	-
Chromium (VI) oxide	Sat. sol	S	S	-	-	-
Cider	-	S	S	S	S	-
Citric acid	Sat. sol	S	S	S	S	S
Citric acid	10%	S	S	S	S	S
Citric acid	25%	S	S	S	S	S
Coconut oil	-	-	-	S	-	-

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Coconut oil alcoholic	-	S	S	-	-	-
Coffee	-	S	S	S	S	-
Copper (II) chloride	Sat. sol	S	S	S	S	-
Copper (II) cyanide	Sat. sol	S	S	S	S	-
Copper (II) fluoride	Sat. sol	S	S	S	-	-
Copper (II) fluoride	2%	S	S	S	S	-
Copper (II) nitrate	Sat. sol	S	S	S	S	S
Copper (II) sulphate	Sat. sol	S	S	S	S	-
Corn oil	-	S	S	S	L	-
Cottonseed oil	-	S	S	S	S	-
Cresols	Greater than 90%	S	S	S	-	-
Cresylic acid	Sat. sol	L	-	-	-	-
Cyclanone	-	S	S	-	-	-
Cyclohexane	-	NS	NS	S	-	-
Cyclohexanol	100%	S	S	S	L	-
Cyclohexanone	100%	S	L	L	NS	NS
Decane	-	L	NS	-	-	-
Decalin (decahydronaphthalene)	100%	S	L	L to NS	NS	NS
Detergents, synthetic	-	S	S	S	S	-
Developers (photographic)	Work. conc	S	S	-	-	-
Dextrin	Sol	S	S	S	S	-
Dextrose	Sol	S	S	S	S	S
Diacetone alcohol	-	L	L	-	-	-
Diazo salts	-	S	S	-	-	-
Dibutyl amine	-	L	NS	-	-	-
Dibutyl ether	-	L	-	L	-	-
Dibutyl phthalate	100%	S	L	S	L	NS
Dichloroacetic acid	100%	-	-	L	-	-
Dichlorobenzene	-	NS	NS	L	NS	-
Dichloroethylenes	100%	NS	NS	L	-	-
Dichloropropylene	-	NS	NS	-	-	-
Diesel oil	-	S	L	L	NS	-
Diethanolamine	100%	S	-	S	-	-
Diethyl ether	100%	L	-	S	L	-
Diethyl ketone	-	L	L	-	-	-
Diethylene glycol	-	S	S	S	S	-
Diglycolic acid	-	S	S	S	-	-
Diisobutylketone	100%	S	L	-	-	-
Diisooctyl phthalate	100%	-	-	S	L	-
Dimethyl amine	100%	S	L	S	-	-
Dimethyl formamide	100%	S	S	S	S	-
Dioctyl phthalate	100%	S	L	L	L	-
Dioxane	100%	S	S	L	L	-
Dipentene	-	NS	NS	-	-	-
Disodium phosphate	-	S	S	S	S	-
Distilled water	w100%	S	S	S	S	S
Drano, plumbing cleaner	-	S	S	-	-	-
Emulsions, photographic	-	S	S	S	S	-
Ethandiol	100%	S	S	-	-	-
Ethanol	35%	S	S	-	-	-
Ethanol	Up to 95%	-	-	S	S	S
Ethanol	100%	S	S	-	-	-
Ethanolamine	100%	-	-	S	-	-

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Ethyl acetate	100%	S	NS	L	NS	NS
Ethyl acrylate	100%	L	NS	-	-	-
Ethyl benzene	-	NS	NS	L	NS	-
Ethyl chloride	100%	NS	NS	NS	NS	NS
Ethylene chloride	100%	NS	NS	L	L	-
Ethylene diamine	100%	S	S	S	-	-
Ethyl ether	100%	L	-	S	L	-
Ethylene glycol	100%	S	S	S	S	S
Ethyl mercaptan	-	NS	NS	-	-	-
Ferric chloride	Sat. sol	S	S	S	S	S
Ferric nitrite	Sat. sol	S	S	S	S	S
Ferric sulphate	Sat. sol	S	S	S	S	S
Ferrous chloride	Sat. sol	S	S	S	S	S
Ferrous sulphate	Sat. sol	S	S	S	S	-
Fish solubles	Sol	S	S	-	-	-
Fluoboric acid	-	S	S	-	-	-
Fluorine gas, dry	100%	NS	NS	NS	NS	-
Fluorine gas, wet	100%	NS	NS	NS	NS	-
Fluorosilicic acid	Conc	S	L	-	-	-
Fluorosilicic acid	40%	S	S	-	-	-
Formaldehyde	40%	S	S	S	-	-
Formic acid	10%	S	S	S	S	L
Formic acid	50%	S	S	S	-	-
Formic acid	85%	S	S	S	NS	NS
Formic acid	98 to 100%	S	S	-	-	-
Formic acid, anhydrous	100%	-	-	S	L	L
Fructose	Sat. sol	S	S	S	S	S
Fruit juice	Sol	S	S	S	S	S
Fruit pulps	Sol	S	S	-	-	-
Furfural	100%	NS	NS	L	-	-
Furfuryl alcohol	100%	S	L	S	L	-
Gallic acid	Sat. sol	S	S	-	-	-
Gasoline, petrol	-	L	L	NS	NS	NS
Gelatine	-	S	S	S	S	-
Glucose	20%	-	-	S	S	S
Glucose	Sat. sol	S	S	-	-	-
Glycerine	100%	S	S	S	S	S
Glycerol	100%	S	S	S	S	S
Glycolic acid	30%	S	S	S	-	-
Glycolic acid	Sol	S	S	-	-	-
Heptane	100%	L	NS	L	NS	NS
Hexachlorobenzene	-	S	L	-	-	-
Hexachlorphene	-	L	L	-	-	-
Hexane	100%	S	L	S	L	-
Hexanetriol	-	S	S	S	S	-
Hydrobromic acid	Up to 48%	S	S	S	L	NS
Hydrobromic acid	Up to 100%	S	S	-	-	-
Hydrochloric acid	Up to 20%	S	S	S	S	S
Hydrochloric acid	30%	S	S	S	L	L
Hydrochloric acid	Conc	S	S	S	-	-
Hydrocyanic acid	10%	S	S	S	S	-
Hydrocyanic acid	Sat. sol	S	S	-	-	-
Hydrofluoric acid	Up to 40%	S	S	S	-	-

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Hydrofluoric acid	60%	S	L	-	-	-
Hydrogen	100%	S	S	S	-	-
Hydrogen chloride	Dry gas	S	S	S	S	-
Hydrogen chloride	Wet gas	S	S	S	S	-
Hydrogen peroxide	Up to 30%	S	S	S	L	-
Hydrogen peroxide	90%	S	NS	-	-	-
Hydrogen sulphide	Dry gas	S	S	S	S	-
Hydroquinone	Sat. sol	S	S	S	S	-
Hydroxylamine	Up to 12%	S	S	S	S	-
Inks	-	S	S	S	S	-
Iodine (in alcohol)	-	NS	NS	S	-	-
Iron (II) chloride	Sat. sol	S	S	-	-	-
Iron (II) sulphate	Sat. sol	S	S	-	-	-
Iron (III) chloride	Sat. sol	S	S	-	-	-
Iron (II) nitrate	Sol	S	S	-	-	-
Iron (III) sulphate	Sat. sol	S	S	-	-	-
Isooctane	100%	S	L	L	NS	NS
Isopentane	-	NS	NS	-	-	-
Isopropanol	100%	S	S	S	S	S
Isopropylamine	-	NS	NS	-	-	-
Isopropyl ether	100%	S	NS	L	-	-
Kerosene	-	NS	NS	L	NS	NS
Lactic acid	Up to 90%	S	S	S	S	-
Lactic acid	Up to 100%	S	S	-	-	-
Lanoline	-	-	-	S	L	-
Latex	-	S	S	S	S	-
Lead acetate	Dil. sol	S	S	S	S	-
Lead acetate	Sat. sol	S	S	S	S	-
Lead arsenate	-	S	S	-	-	-
Linseed oil	-	-	-	S	S	S
Lubricating oil	-	S	S	S	L	-
Lysol	-	L	NS	S	L	-
Magnesium carbonate	Sat. sol	S	S	S	S	S
Magnesium chloride	Sat. sol	S	S	S	S	-
Magnesium hydroxide	Sat. sol	S	S	S	S	-
Magnesium nitrate	Sat. sol	S	S	S	S	-
Magnesium sulphate	Sat. sol	S	S	S	S	-
Maleic acid	Sat. sol	S	S	S	S	-
Malic acid	Sat. sol	S	S	S	S	-
Mercury (I) nitrate	Sol	S	S	S	S	-
Mercury (II) chloride	Sat. sol	S	S	S	S	-
Mercury (II) cyanide	Sat. sol	S	S	S	S	-
Mercury	100%	S	S	S	S	-
Methanol	5%	-	-	S	L	L
Methanol	100%	S	S	S	-	-
Methyl acetate	100%	S	S	S	S	-
Methyl amine	Up to 32%	-	-	S	-	-
Methyl benzoic acid	Sat. sol	L	-	-	-	-
Methyl bromide	100%	NS	NS	NS	NS	NS
Methyl chloride	100%	NS	NS	NS	NS	NS
Methylcyclohexane	-	L	NS	L	NS	NS
Methyl ethyl ketone	100%	S	L	S	-	-

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Methylene chloride	100%	NS	NS	L	NS	NS
Methoxybutanol	100%	S	L	-	-	-
Milk	-	S	S	S	S	S
Mineral oils	-	S	L	S	L	NS
Molasses	Work. conc	S	S	S	S	-
Monochloroacetic acid	> 85%	-	-	S	S	-
Motor oil	-	S	S	S	L	-
Naphtha	-	L	NS	S	NS	NS
Naphthalene	-	L	-	L	-	-
Nickel chloride	Sat. sol	S	S	S	S	-
Nickel nitrate	Sat. sol	S	S	S	S	-
Nickel sulphate	Sat. sol	S	S	S	S	-
Nicotine	Dil. sol	S	S	-	-	-
Nicotinic acid	Dil. sol	S	-	-	-	-
Nitric acid	25%	S	S	S	NS	NS
Nitric acid	From 40 to 50%	L	NS	L	NS	NS
Nitric acid, fuming (with nitrogen dioxide)	-	NS	NS	NS	NS	NS
Nitrobenzene	100%	NS	NS	S	L	-
Nitroethane	100%	S	NS	-	-	-
Nitromethane	100%	S	-	-	-	-
Nitrotoluene	-	NS	NS	S	L	-
n-Octane	-	S	S	-	-	-
Octyl alcohol	-	S	NS	-	-	-
Oil and fats	-	S	L	S	L	-
Oleic acid	100%	S	S	S	L	-
Oleum	-	NS	NS	NS	NS	NS
Olive oil	-	S	NS	S	S	L
Orthophosphoric acid	50%	S	S	-	-	-
Orthophosphoric acid	95%	S	L	-	-	-
Oxalic acid	Sat. sol	S	S	S	L	NS
Oxygen, gas	-	S	L	S	-	-
Ozone	100%	L	NS	L	NS	-
Paraffin oil	-	S	S	S	L	NS
Peanut oil		-	-	S	S	-
Pentane	-	NS	NS	-	-	-
Peppermint oil		-	-	S	-	-
Perchloric acid	20%	S	S	S	S	-
Perchloric acid	50%	S	L	-	-	-
Perchloric acid	70%	S	NS	-	-	-
Perchloroethylene	-	NS	NS	L	NS	-
Petroleum ether (ligroine)		NS	NS	L	L	-
Phenol	90%	S	S	S	-	-
Phosphine, gas		S	S	S	S	-
Phosphoric acid	Up to 85%	S	S	S	S	S
Phosphorus (III) chloride	100%	S	L	-	-	-
Phosphorus (II) chloride	100%	S	L	-	-	-
Phosphorus oxychloride	100%	-	-	L	-	-
Phosphorus pentoxide	100%	S	S	S	S	-
Phosphorus trichloride	100%	S	L	L	-	-
Photographic solutions	-	S	S	S	L	-
Phthalic acid	50%	S	S	S	S	-
Picric acid	Sat. sol	S	-	S	-	-

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Plating solutions	-	S	S	-	-	-
Potassium acetate	-	S	S	-	-	-
Potassium aluminium sulphate	Sat. sol	S	S	-	-	-
Potassium benzoate	-	S	S	-	-	-
Potassium bicarbonate	Sat. sol	S	S	S	S	S
Potassium bisulphate	Sat. sol	S	S	S	S	-
Potassium bisulphite	Sol	S	S	S	-	-
Potassium borate	Sat. sol	S	S	S	S	-
Potassium bromate	Up to 10%	S	S	S	S	-
Potassium bromate	Sat. sol	S	S	-	-	-
Potassium bromide	Sat. sol	S	S	S	S	-
Potassium carbonate	Sat. sol	S	S	S	S	-
Potassium chlorate	Sat. sol	S	S	S	S	-
Potassium chloride	Sat. sol	S	S	S	S	-
Potassium chromate	Sat. sol	S	S	S	S	-
Potassium cyanide	Sol	S	S	S	-	-
Potassium dichromate	Sat. sol	S	S	S	S	S
Potassium ferricyanide	Sat. sol	S	S	S	S	-
Potassium ferrocyanide	Sat. sol	S	S	S	S	-
Potassium fluoride	Sat. sol	S	S	S	S	-
Potassium hexafluorosilicate	Sat. sol	S	S	-	-	-
Potassium hydroxide	Up to 50%	S	S	S	S	S
Potassium hypochlorite	Sol	S	L	-	-	-
Potassium iodate	10%	S	S	-	-	-
Potassium iodide	Sat. sol	S	S	S	-	-
Potassium nitrate	Sat. sol	S	S	S	S	-
Potassium orthophosphate	Sat. sol	S	S	-	-	-
Potassium oxalate	Sat. sol	S	S	-	-	-
Potassium perchlorate	10%	S	S	S	S	-
Potassium perchlorate	Sat. sol	S	S	-	-	-
Potassium permanganate	20%	S	S	-	-	-
Potassium permanganate	(2 N) 30%	-	-	S	-	-
Potassium persulphate	Sat. sol	S	S	S	S	-
Potassium phosphate	Sat. sol	S	S	-	-	-
Potassium sulphate	Sat. sol	S	S	S	S	-
Potassium sulphide	Sat. sol	S	S	S	S	-
Potassium sulphite	Sat. sol	-	-	S	S	-
Potassium thiocyanate	Sat. sol	S	S	-	-	-
Potassium thiosulphate	Sat. sol	S	S	S	S	-
Propane, gas	100%	-	-	S	-	-
Propargyl alcohol	-	S	S	-	-	-
n-Propanol	-	S	S	S	S	-
Propionic acid	50%	S	S	S	-	-
Propionic acid	100%	S	L	S	-	-
Propylene dichloride	100%	NS	NS	NS	NS	-
Propylene glycol	-	S	S	S	S	-
Pyridine	100%	S	L	L	-	-
Quinol (hydroquinone)	Sat. sol	S	S	-	-	-
Resorcinol	Sat. sol	S	S	S	S	-
Salicylic acid	Sat. sol	S	S	S	S	-
Sea water	-	S	S	S	S	S

S – satisfactory; L – limited; NS – not satisfactory

Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Selenic acid	-	S	S	-	-	-
Sewage (residential)	-	S	S	S	S	-
Silicon oil	-	S	S	S	S	S
Silver acetate	Sat. sol	S	S	S	S	-
Silver cyanide	Sat. sol	S	S	S	S	-
Silver nitrate	Sat. sol	S	S	S	S	L
Soap solution	100%	S	S	S	S	-
Sodium acetate	Sat. sol	S	S	S	S	S
Sodium antimonate	Sat. sol	S	S	S	S	-
Sodium arsenite	Sat. sol	S	S	S	S	-
Sodium benzoate	35%	S	S	S	L	-
Sodium benzoate	Sat. sol	S	S	-	-	-
Sodium bicarbonate	Sat. sol	S	S	S	S	S
Sodium bisulphate	Sat. sol	S	S	S	S	-
Sodium bisulphite	Sat. sol	S	S	S	S	-
Sodium borate	-	S	S	S	S	L
Sodium bromide	Sat. sol	S	S	S	S	-
Sodium carbonate	Sat. sol	S	S	S	S	-
Sodium chlorate	Sat. sol	S	S	S	S	-
Sodium chloride	Sat. sol	S	S	S	S	-
Sodium chlorite	2%	-	-	S	L	NS
Sodium chlorite	20%	-	-	S	L	NS
Sodium cyanide	Sat. sol	S	S	S	-	-
Sodium dichromate	Sat. sol	S	S	S	S	S
Sodium ferricyanide	Sat. sol	S	S	-	-	-
Sodium ferrocyanide	Sat. sol	S	S	S	S	-
Sodium fluoride	Sat. sol	S	S	S	S	-
Sodium hexafluorosilicate	Sat. sol	S	S	-	-	-
Sodium hydroxide	Sol	S	S	S	S	S
Sodium hypochloride	-	S	S	-	-	-
Sodium hypochlorite	5%	S	S	S	S	-
Sodium hypochlorite	10% - 15%	S	S	S	-	-
Sodium hypochlorite	15% available Cl	S	S	-	-	-
Sodium hypochlorite	20%	-	-	L	L	NS
Sodium iodate	10%	S	S	-	-	-
Sodium iodide	Sat. sol	S	S	-	-	-
Sodium metaphosphate	Sol	-	-	S	-	-
Sodium nitrate	Sat. sol	S	S	S	S	-
Sodium nitrite	Sat. sol	S	S	S	S	-
Sodium ortophosphate	Sat. sol	S	S	-	-	-
Sodium oxalate	Sat. sol	S	S	-	-	-
Sodium perborate	Sat. sol	-	-	S	S	-
Sodium phosphate	Sat. sol	S	S	S	S	S
Sodium silicate	Sol	S	S	S	S	-
Sodium sulphate	Sat. sol	S	S	S	S	-
Sodium sulphide	Sat. sol	S	S	S	-	-
Sodium sulphite	Sat. sol	S	S	S	S	-
Sodium thiocyanate	Sat. sol	S	S	-	-	-
Sodium thiosulphate (hyposulphate)	Sat sol	-	-	S	-	-
Soybean oil		-	-	S	L	-
Stannic chloride	Sat. sol	S	S	S	S	-
Stannous chloride	Sat. sol	S	S	S	S	-
Starch solution	Sat. sol	S	S	S	S	-
Stearic acid	Sat. sol	S	-	S	L	-
Styrene	Sol	L	NS	L	NS	-

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Succinic acid	Sat. sol	-	-	S	S	-
Sulphur dioxide	Dry gas	S	S	S	S	-
Sulphur dioxide	Wet gas	-	-	S	S	-
Sulphur trioxide	100%	NS	NS	NS	-	-
Sulphuric acid	Up to 10%	S	S	S	S	S
Sulphuric acid	30%	S	S	S	S	-
Sulphuric acid	50%	S	S	S	L	L
Sulphuric acid	70%	S	L	S	L	L
Sulphuric acid	80%	S	NS	S	L	L
Sulphuric acid	96%	L	NS	S	L	NS
Sulphuric acid	98%	L	NS	L	NS	NS
Sulphuric acid	Fuming	NS	NS	L	NS	NS
Sulphurous acid	Sol	S	S	S	S	-
Tallow	-	S	L	S	S	-
Tannic acid	Sol	S	S	S	S	-
Tartaric acid	Sat. sol	S	S	S	S	-
Tetrachloroethylene	100%	NS	NS	NS	NS	-
Tetrachlormethane	100%	L	NS	-	-	-
Tetradecane		NS	NS	-	-	-
Tetrahydrofuran	100%	NS	NS	L	NS	NS
Tetrahydronaphthalene	100%	S	L	L	NS	NS
Tetralin	100%	-	-	NS	NS	NS
Thionyl chloride	100%	NS	NS	NS	NS	-
Thiophene	100%	-	-	S	L	-
Tin (II) chloride	Sat. sol	S	S	S	S	-
Tin (IV) chloride	Sol	S	S	S	S	-
Titanium tetrachloride	Sat. sol	NS	NS	-	-	-
Toluene	100%	L	NS	L	NS	NS
Tribromomethane	-	NS	NS	-	-	-
Tricholoroacetic acid	50%	S	S	S	S	-
Trichloroacetaldehyde	-	S	-	-	-	-
Trichlorobenzene	Pure	-	-	NS	NS	NS
Trichloroethylene	100%	NS	NS	NS	NS	NS
Triethanolamine	Sol	S	L	S	-	-
Triethylene glycol	-	S	S	S	-	-
Trisodium phosphate	Sat. sol	S	S	S	S	-
Turpentine	-	NS	NS	NS	NS	NS
Urea	Sat. sol	-	-	S	S	-
Urea	Sol	S	S	-	-	-
Urine	-	S	S	S	S	-
Vanilla extract	-	S	S	-	-	-
Vaseline	-	S	S	S	L	-
Vegetable oils	-	S	S	S	S	-
Vinegar	-	S	S	S	S	-
Water: sea, brackish, potable, fresh, mineral, distilled	-	S	S	S	S	S
Wetting agents	-	S	S	-	-	-
Whiskey	-	S	S	S	S	-
Wines	-	S	S	S	S	-
Wines and spirits	-	S	S	S	S	-

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Chemical or Product	Concentration	HDPE Temperature, ºC		PP Temperature, ºC		
		20	60	20	60	100
Xylenes	100%	L	NS	NS	NS	NS
Yeast	Sol	S	S	S	S	S
Zinc bromide	Sat. sol	S	S	S	S	-
Zinc carbonate	Sat. sol	S	S	S	S	-
Zinc chloride	Sat. sol	S	S	S	S	-
Zinc oxide	Sat. sol	S	S	S	S	-
Zinc stearate	-	S	S	S	S	-
Zinc sulphate	Sat. sol	S	S	S	S	-

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