

Conduit

S = Suitable
L = Limited
NS = Not Suitable
- = Not tested

Chemical Resistance Chart

Chemical	Concentration	Temp °C	Conduit
Acetic Acid	Up to 40 %	20	S
		60	S
		100	-
Acetic Acid	50%	20	S
		60	S
		100	L
Acetic Acid - Glacial	> 96 %	20	S
		60	L
		100	NS
Acetic Anhydride	100 %	20	S
		60	L
		100	NS
Acetone	100 %	20	S
		60	S
		100	-
Aceptophenone	100 %	20	S
		60	L
		100	-
Acrylonitrile	100 %	20	S
		60	-
		100	-
Air		20	S
		60	S
		100	S
Alkyl Alcohol	100 %	20	S
		60	S
		100	-
Almond Oil		20	S
		60	-
		100	-
Alum	Sol	20	S
		60	S
		100	-
Ammonia - Aqueous	Sat.sol	20	S
		60	S
		100	-

Chemical	Concentration	Temp °C	Conduit
Ammonia - Dry Gas	100 %	20	S
		60	S
		100	-
Ammonia - Liquid	100 %	20	S
		60	S
		100	-
Ammonium Acetate	Sat.sol	20	S
		60	S
		100	-
Ammonium Chloride	Sat.sol	20	S
		60	S
		100	L
Ammonium Fluoride	Up to 20 %	20	S
		60	S
		100	-
Ammonium Hydrogen Carbonate	Sat.sol	20	S
		60	S
		100	-
Ammonium Metaphosphate	Sat.sol	20	S
		60	S
		100	S
Ammonium Nitrate	Sat.sol	20	S
		60	S
		100	S
Ammonium Persulphate	Sat.sol	20	S
		60	S
		100	-
Ammonium Phosphate	Sat.sol	20	S
		60	-
		100	-
Ammonium Sulphate	Sat.sol	20	S
		60	S
		100	S
Ammonium Sulphide	Sat.sol	20	S
		60	S
		100	-
Amylacetate	100 %	20	L
		60	-
		100	-
Amyl alcohol	100 %	20	S
		60	S
		100	S
Aniline	100 %	20	S
		60	S
		100	-

Chemical	Concentration	Temp °C	Conduit
Apple juice		20	S
		60	-
		100	-
Aqua regia	HCl/HNO ₃ =3/1	20	NS
		60	NS
		100	NS
Barium bromide	Sat.sol	20	S
		60	S
		100	S
Barium carbonate	Sat.sol	20	S
		60	S
		100	S
Barium chloride	Sat.sol	20	S
		60	S
		100	S
Barium hydroxide	Sat.sol	20	S
		60	S
		100	S
Barium sulphide	Sat.sol	20	S
		60	S
		100	S
Beer		20	S
		60	S
		100	-
Benzene	100 %	20	L
		60	NS
		100	NS
Benzoic acid	Sat.sol	20	S
		60	S
		100	-
Benzyl alcohol	100 %	20	S
		60	L
		100	-
Borax	Sol	20	S
		60	S
		100	-
Boric acid	Sat.sol	20	S
		60	-
		100	-
Boron trifluoride	Sat.sol	20	S
		60	-
		100	-
Bromine - gas		20	NS
		60	NS
		100	NS

Chemical	Concentration	Temp °C	Conduit
Bromine - liquid	100 %	20	NS
		60	NS
		100	NS
Butane - gas	100 %	20	S
		60	-
		100	-
Butanol	100 %	20	S
		60	L
		100	L
Butyl acetate	100 %	20	L
		60	NS
		100	NS
Butyl glycol	100 %	20	S
		60	-
		100	-
Butyl phenols	Sat.sol	20	S
		60	-
		100	-
Butyl phthalate	100 %	20	S
		60	L
		100	L
Calcium carbonate	Sat.sol	20	S
		60	S
		100	S
Calcium chlorate	Sat.sol	20	S
		60	S
		100	-
Calcium chloride	Sat.sol	20	S
		60	S
		100	S
Calcium hydroxide	Sat.sol	20	S
		60	S
		100	S
Calcium hypochlorite	Sol	20	S
		60	-
		100	-
Calcium nitrate	Sat.sol	20	S
		60	S
		100	-
Camphor oil		20	NS
		60	NS
		100	NS
Carbon dioxide	dry gas	20	
		60	S
		100	S

Chemical	Concentration	Temp °C	Conduit
Carbon dioxide	wet gas	20	
		60	S
		100	S
Carbon disulphide	100 %	20	S
		60	NS
		100	NS
Carbon monoxide -		20	S
		60	S
		100	-
Carbon tetrachloride	100 %	20	NS
		60	NS
		100	NS
Castor oil	100 %	20	S
		60	S
		100	-
Caustic soda	Up to 50 %	20	S
		60	L
		100	L
Chlorine - aqueous	Sat.sol	20	S
		60	L
		100	-
Chlorine - dry gas	100 %	20	NS
		60	NS
		100	NS
Chlorine - liquid	100 %	20	NS
		60	NS
		100	NS
Chloroacetic acid	Sol	20	S
		60	-
		100	-
Chloroethanol	100 %	20	S
		60	-
		100	-
Chloroform	100 %	20	L
		60	NS
		100	NS
Chlorosulphonic acid	100 %	20	NS
		60	NS
		100	NS
Chrome alum	Sol	20	S
		60	S
		100	-
Chromic acid	Up to 40 %	20	S
		60	L
		100	NS

Chemical	Concentration	Temp °C	Conduit
Citric acid	Sat.sol	20	S
		60	S
		100	S
Coconut oil		20	S
		60	-
		100	-
Copper (II) chloride	Sat.sol	20	S
		60	S
		100	-
Copper (II) nitrate	Sat.sol	20	S
		60	S
		100	S
Copper (II) sulphate	Sat.sol	20	S
		60	S
		100	-
Corn oil		20	S
		60	L
		100	-
Cottonseed oil		20	S
		60	S
		100	-
Cresol	> 90 %	20	S
		60	-
		100	-
Cyclohexane	100 %	20	S
		60	-
		100	-
Cyclohexanol	100 %	20	S
		60	L
		100	-
Cyclohexanone	100 %	20	L
		60	NS
		100	NS
Decalin (decahydronaphthalene)	100 %	20	NS
		60	NS
		100	NS
Dextrin	Sol	20	S
		60	S
		100	-
Dextrose	Sol	20	S
		60	S
		100	S
Dibutyl phthalate	100 %	20	S
		60	L
		100	NS

Chemical	Concentration	Temp °C	Conduit
Dichloroacetic acid	100 %	20	L
		60	-
		100	-
Dichloroethylene (A and B)	100 %	20	L
		60	-
		100	-
Diethanolamine	100 %	20	S
		60	-
		100	-
Diethyl ether	100 %	20	S
		60	L
		100	-
Diethylene glycol	100 %	20	S
		60	S
		100	-
Diglycolic acid	Sat.sol	20	S
		60	-
		100	-
Diisooctyl phthalate	100 %	20	S
		60	L
		100	-
Dimethyl amine - gas		20	S
		60	-
		100	-
Dimethyl formamide	100 %	20	S
		60	S
		100	-
Diocetyl phthalate	100 %	20	L
		60	L
		100	-
Dioxane	100 %	20	L
		60	L
		100	-
Distilled water	100 %	20	S
		60	S
		100	S
Ethanolamine	100 %	20	S
		60	-
		100	-
Ethyl acetate	100 %	20	L
		60	NS
		100	NS
Ethyl alcohol	Up to 95 %	20	S
		60	S
		100	S

Chemical	Concentration	Temp °C	Conduit
Ethyl chloride - gas		20	NS
		60	NS
		100	NS
Ethylene chloride (mono and di)		20	L
		60	L
		100	-
Ethyl ether	100 %	20	S
		60	L
		100	-
Ethylene glycol	100 %	20	S
		60	S
		100	S
Fertic chloride	Sat.sol	20	S
		60	S
		100	S
Formaldehyde	40 %	20	S
		60	-
		100	-
Formic acid	10 %	20	S
		60	S
		100	L
Formic acid	85 %	20	S
		60	NS
		100	NS
Formic acid - anhydrous	100 %	20	S
		60	L
		100	L
Fructose	Sol	20	S
		60	S
		100	S
Fruit juice		20	S
		60	S
		100	S
Gasoline - petrol		20	
		60	
		100	
(aliphatic hydrocarbons)		20	NS
		60	NS
		100	NS
Gelatine		20	S
		60	S
		100	-
Glucose	20 %	20	S
		60	S
		100	S

Chemical	Concentration	Temp °C	Conduit
Glycerine	100 %	20	S
		60	S
		100	S
Glycolic acid	30 %	20	S
		60	-
		100	-
Heptane	100 %	20	L
		60	NS
		100	NS
Hexane	100 %	20	S
		60	L
		100	-
Hydrobromic acid	Up to 48 %	20	S
		60	L
		100	NS
Hydrochloric acid	Up to 20 %	20	S
		60	S
		100	S
Hydrochloric acid	30 %	20	S
		60	L
		100	L
Hydrochloric acid	From 35 to 36 %	20	S
		60	-
		100	-
Hydrofluoric acid	Dil.sol	20	S
		60	-
		100	-
Hydrofluoric acid	40 %	20	S
		60	-
		100	-
Hydrogen	100 %	20	S
		60	-
		100	-
Hydrogen chloride - dry gas	100 %	20	S
		60	S
		100	-
Hydrogen peroxide	Up to 10 %	20	S
		60	-
		100	-
Hydrogen peroxide	Up to 30 %	20	S
		60	L
		100	-
Hydrogen sulphide - dry gas	100 %	20	S
		60	S
		100	-

Chemical	Concentration	Temp °C	Conduit
Iodine in alcohol		20	S
		60	-
		100	-
Isoctane	100 %	20	L
		60	NS
		100	NS
Isopropyl alcohol	100 %	20	S
		60	S
		100	S
Isopropyl ether	100 %	20	L
		60	-
		100	-
Lactic acid	Up to 90 %	20	S
		60	S
		100	-
Lanoline		20	S
		60	L
		100	-
Linseed oil		20	S
		60	S
		100	S
Magnesium carbonate	Sat.sol	20	S
		60	S
		100	S
Magnesium chloride	Sat.sol	20	S
		60	S
		100	-
Magnesium hydroxide	Sat.sol	20	S
		60	S
		100	-
Magnesium sulphate	Sat.sol	20	S
		60	S
		100	-
Malic acid	Sat.sol	20	S
		60	S
		100	-
Mercury (II) chloride	Sat.sol	20	S
		60	S
		100	-
Mercury (II) cyanide	Sat.sol	20	S
		60	S
		100	-
Mercury (I) nitrate	Sol	20	S
		60	S
		100	-

Chemical	Concentration	Temp °C	Conduit
Mercury	100 %	20	S
		60	S
		100	-
Methyl acetate	100 %	20	S
		60	S
		100	-
Methyl alcohol	5 %	20	S
		60	L
		100	L
Methyl amine	Up to 32 %	20	S
		60	-
		100	-
Methyl bromide	100 %	20	NS
		60	NS
		100	NS
Methyl ethyl ketone	100 %	20	S
		60	-
		100	-
Methylene chloride	100 %	20	L
		60	NS
		100	NS
Milk		20	S
		60	S
		100	S
Monochloroacetic acid	> 85 %	20	S
		60	S
		100	-
Naphtha		20	S
		60	NS
		100	NS
Nickel chloride	Sat.sol	20	S
		60	S
		100	-
Nickel nitrate	Sat.sol	20	S
		60	S
		100	-
Nickel sulphate	Sat.sol	20	S
		60	S
		100	-
Nitric acid	Up to 30 %	20	S
		60	NS
		100	NS
Nitric acid	From 40 to 50 %	20	L
		60	NS
		100	NS

Chemical	Concentration	Temp °C	Conduit
Nitric acid - fujming		20	
		60	
		100	
(with nitrogen dioxide)		20	NS
		60	NS
		100	NS
Nitrobenzene	100 %	20	S
		60	L
		100	-
Oleic acid	100 %	20	S
		60	L
		100	-
Oleum		20	
		60	
		100	
(sulphuric acid with 60 % of SO3)		20	S
		60	L
		100	-
Olive oil		20	S
		60	S
		100	L
Oxalic acid	Sat.sol	20	S
		60	L
		100	NS
Oxygen - gas		20	S
		60	-
		100	-
Paraffin oil (FL 65)		20	S
		60	L
		100	NS
Peanut oil		20	S
		60	S
		100	-
Peppermint oil		20	S
		60	-
		100	-
Perchloric acid	(2 N) 20 %	20	S
		60	-
		100	-
Petroleum ether (ligroine)		20	L
		60	L
		100	-
Phenol	5 %	20	S
		60	S
		100	-

Chemical	Concentration	Temp °C	Conduit
Phenol	90 %	20	S
		60	-
		100	-
Phosphine - gas		20	S
		60	S
		100	-
Phosphoric acid	Up to 85 %	20	S
		60	S
		100	S
Phosphorus oxychloride	100 %	20	L
		60	-
		100	-
Picric acid	Sat.sol	20	S
		60	-
		100	-
Potassium bicarbonate	Sat.sol	20	S
		60	S
		100	S
Potassium borate	Sat.sol	20	S
		60	S
		100	-
Potassium bromate	Up to 10 %	20	S
		60	S
		100	-
Potassium bromide	Sat.sol	20	S
		60	S
		100	
Potassium carbonate	Sat.sol	20	S
		60	S
		100	
Potassium chlorate	Sat.sol	20	S
		60	S
		100	
Potassium chloride	Sat.sol	20	S
		60	S
		100	
Potassium chromate	Sat.sol	20	S
		60	S
		100	
Potassium cyanide	Sol	20	S
		60	-
		100	
Potassium dichromate	Sat.sol	20	S
		60	S
		100	S

Chemical	Concentration	Temp °C	Conduit
Potassium ferricyanide	Sat.sol	20	S
		60	S
		100	-
Potassium fluoride	Sat.sol	20	S
		60	S
		100	-
Potassium hydroxide	Up to 50 %	20	S
		60	S
		100	S
Potassium iodide	Sat.sol	20	S
		60	-
		100	-
Potassium nitrate	Sat.sol	20	S
		60	S
		100	-
Potassium perchlorate	10 %	20	S
		60	S
		100	-
Potassium permanganate	(2 N) 30 %	20	S
		60	-
		100	-
Potassium persulphate	Sat.sol	20	S
		60	S
		100	-
Potassium sulphate	Sat.sol	20	S
		60	S
		100	-
Propane - gas	100 %	20	S
		60	-
		100	-
Propionic acid	>50 %	20	S
		60	-
		100	-
Pyridine	100 %	20	L
		60	-
		100	-
Sea water		20	S
		60	S
		100	S
Silicone oil		20	S
		60	S
		100	S
Silver nitrate	Sat.sol	20	S
		60	S
		100	L

Chemical	Concentration	Temp °C	Conduit
Sodium acetate	Sat.sol	20	S
		60	S
		100	S
Sodium benzoate	35 %	20	S
		60	L
		100	-
Sodium bicarbonate	Sat.sol	20	S
		60	S
		100	S
Sodium carbonate	Up to 50 %	20	S
		60	S
		100	L
Sodium chlorate	Sat.sol	20	S
		60	S
		100	-
Sodium chloride	Sat.sol	20	S
		60	S
		100	-
Sodium chlorite	2 %	20	S
		60	L
		100	NS
Sodium chlorite	20 %	20	S
		60	L
		100	NS
Sodium dichromate	Sat.sol	20	S
		60	S
		100	S
Sodium hydrogen carbonate	Sat.sol	20	S
		60	S
		100	S
Sodium hydrogen sulphate	Sat.sol	20	S
		60	S
		100	-
Sodium hydrogen sulphite	Sat.sol	20	S
		60	-
		100	-
Sodium hydroxide	1 %	20	S
		60	S
		100	S
Sodium hydroxide	From 10 to 60 %	20	S
		60	S
		100	S
Sodium hypochlorite	5 %	20	S
		60	S
		100	-

Chemical	Concentration	Temp °C	Conduit
Sodium hypochlorite	10 % - 15 %	20	S
		60	-
		100	-
Sodium hypochlorite	20 %	20	S
		60	L
		100	-
Sodium metaphosphate	Sol	20	S
		60	-
		100	-
Sodium nitrate	Sat.sol	20	S
		60	S
		100	-
Sodium perborate	Sat.sol	20	S
		60	S
		100	-
Sodium phosphate (neutral)		20	S
		60	S
		100	S
Sodium silicate	Sol	20	S
		60	S
		100	-
Sodium sulphate	Sat.sol	20	S
		60	S
		100	-
Sodium sulphide	Sat.sol	20	S
		60	-
		100	-
Sodium sulphite	40 %	20	S
		60	S
		100	S
Sodium thiosulphate (hypo)	Sat.sol	20	S
		60	-
		100	-
Soybean oil		20	S
		60	L
		100	-
Succinic acid	Sat.sol	20	S
		60	S
		100	-
Sulphuric acid	Up to 10%	20	S
		60	S
		100	S
Sulphuric dioxide - dry or wet	100 %	20	S
		60	S
		100	-

Chemical	Concentration	Temp °C	Conduit
Sulphur acid	From 10 to 30 %	20	S
		60	S
		100	-
Sulphuric acid	50 %	20	S
		60	L
		100	L
Sulphuric acid	96 %	20	S
		60	L
		100	NS
Sulphuric acid	98 %	20	L
		60	NS
		100	NS
Sulphurous acid	Up to 30 %	20	S
		60	-
		100	-
Tartaric acid	Sat.sol	20	S
		60	S
		100	-
Tetrahydrofuran	100 %	20	L
		60	NS
		100	NS
Tetralin	100 %	20	NS
		60	NS
		100	NS
Thiophene	100 %	20	S
		60	L
		100	-
Tin (IV) chloride	Sol	20	S
		60	S
		100	-
Tin (II) chloride	Sat.sol	20	S
		60	S
		100	-
Toluene	100 %	20	L
		60	NS
		100	NS
Trichloroacetic acid	Up to 50 %	20	S
		60	S
		100	-
Trichloroethylene	100 %	20	NS
		60	NS
		100	NS
Triethanolamine	Sol	20	S
		60	-
		100	-

Chemical	Concentration	Temp °C	Conduit
Turpentine		20	NS
		60	NS
		100	NS
Urea	Sat.sol	20	S
		60	S
		100	-
Vinegar		20	S
		60	S
		100	-
Water brackish - mineral - potable		20	S
		60	S
		100	S
Whiskey		20	S
		60	S
		100	-
Wines		20	S
		60	S
		100	-
Xylene	100 %	20	NS
		60	NS
		100	NS
Yeast	Sol	20	S
		60	S
		100	S
Zinc chloride	Sat.sol	20	S
		60	S
		100	-
Zinc sulphate	Sat.sol	20	S
		60	S
		100	-
Acetaldehyde	100%	25	L
		60	-
		100	-
Acetaldehyde	40%	25	S
		60	L
		100	-
Adipic Acid	Sat	25	S
		60	S
		100	-
Aluminium-Chloride	all	25	-
		60	-
		100	-
Aluminium-Fluoride	100%	25	-
		60	-
		100	-

Chemical	Concentration	Temp °C	Conduit
Aluminium-Hydroxide	all	25	-
		60	-
		100	-
Aluminium-Nitrate	Undefinedl	25	-
		60	-
		100	-
Aluminium-Sulphate	Dil.sol	25	S
		60	S
		100	-
Aluminium-Sulphate	Sat.sol	25	S
		60	S
		100	L
Ammonium Carbonate	All	20	S
		60	S
		100	-
Ammonium Hydroxide	28%	20	S
		60	S
		100	-
Ammonium Phosphate Dibasic	all	20	S
		60	S
		100	-
Ammonium Phosphate Meta	all	20	S
		60	S
		100	-
Ammonium Phosphate Tri	all	20	S
		60	S
		100	-
Ammonium Sulphydrate	Dil.sol	20	S
		60	S
		100	-
Ammonium Sulphydrate	Sat.sol	20	S
		60	S
		100	-