

Chemical Compatibility Chart

Material Chemical	303 Stainless Steel		304 Stainless Steel (CF-8)		316 Stainless Steel (CF-8M)		410 Stainless Steel (CA-15)		440 Stainless Steel		Aluminum	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC	Teflon	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Milon®	Buna N (Nitrile)	Silicon	Neoprene	Ethylene Propylene (EPDM)	Natural Rubber	Epoxy	
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Acetaldehyde	A	A	A	C	-	B	A	A	D	-	-	-	-	-	-	C	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Acetamide	-	B	A	A	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	A	A	A	-	-	-	-	-	
Acetate Solv.	A	B	A	-	B	B	-	-	A	C	B	A	B	A	-	A	B	A	-	A	B	D	-	A	A	D	D	D	-	D	-	-	-	
Acetic Acid, Glacial	-	B	A	D	A	B	A	A	C	C	D	A	C	A	C	D	A	C	A	C	D	B	B	A	A	A	D	D	B	C	B	C	B	
Acetic Acid 20%	-	-	A	A	-	-	A	A	-	C	-	-	B	A	A	D	-	A	A	D	-	A	A	-	A	D	C	-	C	-	-	-	B	
Acetic Acid 80%	-	-	A	A	-	-	A	A	-	C	-	-	D	A	B	D	-	B	-	-	-	-	-	-	A	D	C	-	D	-	-	-	B	
Acetic Acid	-	B	A	-	B	B	A	A	C	D	C	A	A	A	D	B	A	A	A	D	B	A	A	A	A	D	C	C	-	C	B	C	A	
Acetic Anhydride	B	A	A	D	B	B	A	A	C	D	B	D	D	A	D	D	A	D	D	A	D	D	A	A	A	A	D	A	C	B	B	C	A	
Acetone	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	D	A	A	D	A	D	A	C	B	A	A	A	D	D	B	C	A	D	B
Acetyl Chloride	-	C	A	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Acetylene	A	A	A	-	A	A	-	-	B	-	A	A	B	-	-	A	A	B	-	-	A	-	D	A	A	A	A	A	C	B	A	C	A	
Acrylonitrile	A	A	C	A	-	B	-	B	A	-	C	-	-	-	-	-	-	-	-	-	-	-	B	A	A	A	C	D	-	D	D	-	-	
Aluminum Chloride 20%	-	D	C	-	D	B	A	A	D	-	D	A	A	-	A	A	B	A	A	A	A	B	A	A	A	A	A	-	A	-	-	-	-	
Aluminum Chloride	C	D	C	D	-	D	C	A	C	-	D	B	A	A	A	D	B	A	A	A	D	B	A	-	A	-	A	A	C	A	-	-	-	
Aluminum Flouride	-	D	C	D	D	-	D	B	-	-	-	-	-	-	-	A	A	A	A	D	B	A	-	A	-	A	A	C	A	-	-	-	-	
Aluminum Hydroxide	-	A	A	C	A	-	-	A	-	D	A	A	A	A	A	A	A	A	A	A	A	-	-	-	-	A	A	A	-	-	-	-	-	-
Alum Potassium Sulfate (ALUM)10%	-	A	-	-	-	A	-	B	-	-	D	A	A	A	-	A	A	-	-	A	A	-	-	-	A	A	-	-	-	-	-	-	-	
Alum Potassium Sulfate (ALUM) 100%	-	D	A	B	B	B	-	B	C	-	-	A	A	A	A	D	B	A	-	-	A	A	-	A	A	A	-	-	-	-	-	-	-	
Aluminum Sulfate	-	C	C	D	A	A	A	A	C	C	D	A	A	A	A	A	B	A	A	A	B	A	A	A	A	A	A	-	-	-	-	-	-	
Amines	A	A	-	-	A	B	A	B	-	A	B	C	A	B	A	-	-	-	-	-	-	-	-	-	-	A	D	D	C	B	B	C	A	
Ammonia 10%	-	-	A	-	-	-	A	A	-	-	-	-	-	-	-	A	A	A	A	-	-	-	-	-	-	A	A	D	-	-	-	-	-	
Ammonia Anhydrous	A	B	A	-	A	B	A	D	-	D	B	A	A	A	A	A	B	A	A	A	B	C	A	B	C	A	A	D	B	B	A	A	D	A
Ammonia, Liquids	-	A	A	A	D	-	B	D	-	A	A	A	A	-	D	A	-	-	-	-	D	A	-	-	-	A	D	B	B	A	A	D	A	
Ammonia, Nitrate	-	A	A	-	A	C	-	-	D	-	-	-	-	-	-	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Bifluoride	-	C	A	D	-	D	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Carbonate	B	A	A	C	A	C	A	B	B	-	C	B	A	A	A	A	A	A	A	-	-	-	-	-	-	A	B	D	C	A	A	-	-	
Ammonium Casenite	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Chloride	C	A	C	D	A	C	A	D	C	D	D	A	A	A	A	D	B	A	A	A	B	A	A	A	A	A	A	A	C	A	A	A	A	
Ammonium Hydroxide	A	A	A	B	A	C	A	A	D	D	A	C	A	A	A	A	B	A	A	A	B	A	A	A	A	A	B	B	B	A	A	C	A	
Ammonium Nitrate	A	A	A	-	A	B	A	A	D	D	A	D	A	A	A	D	B	A	A	A	D	B	A	A	A	A	A	A	C	A	A	A	A	
Ammonium Oxalate	-	A	A	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Persulfate	-	A	A	B	A	C	A	A	A	-	D	A	A	A	A	D	-	-	-	-	-	-	-	-	-	A	C	A	-	-	-	-	-	
Ammonium Phosphate, Dibasic	B	A	A	-	A	B	A	A	C	-	-	D	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Phosphate, Monobasic	-	A	A	A	B	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Phosphate, Tribasic	B	A	A	-	A	B	A	A	C	-	C	D	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Sulfate	C	A	B	C	A	B	A	A	B	C	C	C	A	A	A	D	B	A	A	A	A	A	A	A	A	D	A	B	A	A	A	A		
Ammonium Thio-Sulfate	-	-	A	-	-	-	-	-	-	-	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Amyl Acetate	B	A	A	A	C	B	A	A	C	-	-	C	D	A	D	B	D	D	A	A	D	D	A	A	A	D	D	D	D	A	A	D	A	
Amyl Alcohol	-	A	A	A	-	B	A	A	A	-	-	A	A	A	C	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Amyl Chloride	-	C	B	A	-	D	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aniline	B	A	A	A	A	C	C	B	C	-	-	C	D	A	D	C	C	B	A	A	A	A	A	A	A	A	D	D	C	D	B	D	A	
Anti-Freeze	-	A	A	-	-	A	-	A	B	B	B	C	A	A	A	B	A	A	A	A	B	A	A	A	A	A	A	C	A	A	A	A	A	
Antimony Plating 55°C	-	-	A	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Antimony Trichloride	-	D	D	D	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aqua Regia (80% HCl, 20% HNO)	-	D	D	-	-	D	A	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arochlor 1248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aromatic Hydrocarbons	-	-	A	-	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arsenic Acid	B	A	A	B	-	D	-	-	D	B	D	D	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arsenic Plating 45°C	-	-	A	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asphalt	-	B	A	A	-	C	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium Carbonate	B	A	A	A	B	A	A	B	-	B	B	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium Chloride	C	A	A	B	A	D	A	B	-	C	C	A	A	A	B	B	A	A	A	A	B	B	A	A	A	A	A	B	A	A	A	A	A	
Barium Cyanide	-	-	A	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium Hydroxide	B	C	A	A	A	D	B	B	B	-	C	C	A	A	A	B	A	A	A	A	B	A	A	A	A	A	A	C	A	A	A	A	A	
Barium Nitrate	-	A	A	-	-	-	A	-	D	-	A	A	B	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium Sulfate	B	A	A	A	A	D	A	C	-	C	C	A	A	A	A	B	A	A	A	A	B	A	A	A	B	A	A	D	A	A	A	-	-	
Barium Sulfide	B	A	A	A	-	D	-	-	C	-	C	C	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beer	A	A	A	A	-	A	A	A	A	B	D	D	A	A	A	D	B	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beet Sugar Liquids	A	A	A	-	-	A	-	-	A	B	A	-	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzaldehyde	A	A	A	A	-	B	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzene	B	A	A	A	A	B	A	B	B	A	B	C	D	A	D	A	D	D	A	D	D	A	A	A	A	A	D	-	D	D	D	A		
Benzoic Acid	B	A	A	A	B	A	A	B	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzol	-	A	A	-	-	B	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzyl Alcohol	-	A	A	A	-	B	A	A	A	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Borax (Sodium Borate)	-	A	A	A	A	C	-	A	A	B	A	C	A	A	A	B	A	A	A	B	A	A	A	A	A	A	B	C	A	A	C	A	A	
Boric Acid</																																		

Chemical Compatibility Chart

Material Chemical	303 Stainless Steel		304 Stainless Steel (CF-8)		316 Stainless Steel (CF-8M)		410 Stainless Steel (CA-15)		440 Stainless Steel		Aluminum	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC	Teflon	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Milon®	Buna N (Nitrile)	Silicon	Neoprene	Ethylene Propylene (EPDM)	Natural Rubber	Epoxy	
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Coffee	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Copper Chloride	C	D	D	D	B	D	A	A	D	-	D	-	D	-	D	-	A	A	A	D	B	A	A	-	A	A	A	A	A	A	A	A	A	
Copper Cyanide	-	A	A	B	A	D	A	A	C	-	D	-	D	-	A	A	A	A	B	A	A	A	A	A	B	B	B	-	A	A	A	A	C	
Copper Floroborate	-	D	D	-	-	D	-	B	D	-	D	-	D	-	A	A	-	A	A	-	-	A	-	A	A	B	B	-	A	A	A	A	A	
Copper Nitrate	B	A	A	B	B	D	A	A	D	-	-	-	-	-	A	A	A	D	B	A	-	A	A	A	A	A	A	A	A	A	A	A	A	
Copper Plating (Cyanide)	-	-	-	-	-	A	A	A	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	-	-	C	B	-	-	A	-	-	-	
Copper Strike Bath 50°C	-	-	-	-	-	A	A	A	-	-	-	-	-	-	-	-	D	A	A	A	-	A	-	-	D	A	A	-	B	-	-	-	C	
Rochelle Salt Bath 65°C	-	-	A	-	-	-	A	A	-	-	-	-	-	-	-	-	D	A	A	A	-	A	-	-	D	A	A	-	B	-	-	-	C	
High Speed Bath 80°C	-	-	A	-	-	-	A	A	-	-	-	-	-	-	-	-	D	A	A	A	-	A	-	-	D	A	A	-	B	-	-	-	C	
Copper Plating (Acid)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper Sulfate Bath R.T.	-	-	D	-	-	-	A	A	-	-	-	-	-	-	-	-	A	A	A	D	-	A	-	-	D	A	A	-	A	-	-	-	D	
Copper Fluoborate Bath 50°C	-	-	D	-	-	-	D	A	-	-	-	-	-	-	-	-	A	A	A	D	-	A	-	-	D	A	B	-	C	-	-	-	D	
Copper (Misc.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper Pyrophosphate 60°C	-	-	A	-	-	-	A	A	-	-	-	-	-	-	-	-	A	A	A	A	-	A	-	-	B	A	A	-	A	-	-	-	B	
Copper (Electroless) 60°C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	
Copper Sulfate 5%	-	A	A	-	A	D	A	D	D	D	-	A	A	D	D	-	A	A	A	D	B	A	A	A	A	A	A	A	C	A	-	-	C	A
Copper Sulfate	B	B	-	A	-	-	A	C	D	-	-	A	A	C	-	-	A	A	A	C	-	A	-	-	A	B	B	-	A	A	-	-	A	
Cream	-	A	A	-	-	A	-	-	C	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cresols	-	A	A	-	-	B	-	-	D	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cresylic Acid	B	A	A	A	-	C	A	B	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cyclohexane	-	A	-	A	-	A	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cyanic Acid	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Detergents	-	A	A	-	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diacetone Alcohol	-	A	A	A	-	A	A	A	C	-	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dichlorethane	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diesel Fuel	A	A	A	-	A	-	-	A	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diethylamine	A	A	-	A	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diethylene Glycol	-	A	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diphenyl Oxide	-	A	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dyes	-	A	A	-	-	B	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Epsom Salts (Magnesium Sulfate)	B	A	A	-	A	A	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethane	A	A	-	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethanolamine	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ether	A	A	A	A	A	-	B	B	A	-	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethyl Acetate	-	A	A	A	-	B	-	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethyl Alcohol	-	A	A	A	A	B	A	A	C	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethyl Chloride	-	A	A	A	A	B	A	B	B	-	C	D	D	A	D	A	D	D	A	A	D	D	A	A	A	A	A	D	D	C	A	A	A	
Ethyl Sulfate	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylene Chloride	-	A	A	-	-	C	B	B	A	-	C	C	D	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylene Dichloride	-	A	A	-	-	D	A	B	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylene Glycol	-	A	A	A	-	A	-	A	B	B	C	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	
Ethylene Oxide	-	-	A	-	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fatty Acids	-	A	A	-	-	B	A	A	C	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ferric Chloride	-	D	D	D	D	A	B	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ferric Nitrate	-	A	B	A	D	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ferric Sulfate	-	A	C	C	A	D	A	A	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ferrous Chloride	-	D	D	D	-	D	A	B	C	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ferrous Sulfate	B	A	C	A	-	D	A	B	C	-	D	D	A	A	A	D	B	A	A	A	D	B	A	A	A	A	A	B	-	-	-	-	-	
Fluoboric Acid	-	D	B	-	-	-	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fluorine	D	D	D	-	-	D	D	A	D	-	D	D	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fluosilicic Acid	-	-	B	C	-	D	D	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Formaldehyde 40%	-	-	A	A	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Formaldehyde	A	A	A	-	A	A	B	A	B	D	A	A	A	D	A	B	A	A	A	D	B	A	A	A	A	A	A	C	B	D	B	A	A	
Formic Acid	C	A	B	A	B	D	C	A	C	C	D	D	A	D	D	A	D	B	A	A	A	A	A	A	A	A	B	D	C	D	A	C	B	
Freon 11	A	-	A	A	-	B	-	-	B	-	C	B	B	A	D	A	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon 12 (Wet)	-	-	D	A	-	B	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon 22	-	-	A	A	-	B	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon 113	-	-	A	A	-	B	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon T.F.	-	-	A	-	-	B	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fruit Juice	A	A	A	-	A	B	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fuel Oils	A	A	A	-	-	A	A	A	B	-	C	B	A	A	A	A	A	A	A	D	B	A	A	A	A	A	A	A	C	B	D	D	A	
Furan Resin	-	A	A	-	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Furfural	A	A	A	A	-	A	-	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gallic Acid	B	A	A	A	-	A	-	A	A	-	D	D	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gasoline	A	A	A	A	A	A	D	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gelatin	A	A	A	D	A	A	-	-	A</																									

Chemical Compatibility Chart

Material Chemical	303 Stainless Steel		304 Stainless Steel (CF-8)		316 Stainless Steel (CF-8M)		410 Stainless Steel (CA-15)		440 Stainless Steel		Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC	Teflon	Noryl	Nylon	Polyethylene	Polypropylene	Rylon	Carbon	Ceramic	Milon®	Buna N (Nitrile)	Silicon	Neoprene	Ethylene Propylene (EPDM)	Natural Rubber	Epoxy	
Tin-Lead Plating 40°C	-	-	C	-	-	-	-	-	-	D	A	-	-	-	-	-	-	A	A	D	-	A	-	-	D	A	B	-	C	-	-	A		
Toluene, Toluol	A	A	A	A	-	A	A	A	A	A	A	A	A	A	A	A	A	D	A	D	A	D	D	A	A	C	D	D	D	D	D	D	A	
Tomato Juice	A	A	A	-	-	A	-	-	C	-	C	C	-	C	C	-	A	A	A	-	A	A	-	A	A	A	A	A	-	A	-	-	A	
Trichlorethane	-	C	A	-	-	C	A	A	C	-	C	-	C	-	C	-	-	A	D	-	-	-	-	-	A	A	A	D	D	D	D	A		
Trichlorethylene	B	A	A	A	-	B	A	A	B	A	C	B	D	A	D	C	D	D	C	A	A	A	D	D	D	D	D	D	D	D	D	A		
Trichloropropane	-	-	A	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	D	-	-	-	-	-	A	A	A	B	D	-	A	-	A	
Tricresylphosphate	-	-	A	-	-	B	A	A	-	-	D	A	A	-	-	D	A	A	-	-	-	-	-	-	A	A	B	D	-	D	A	-	A	
Triethylamine	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	A	-	B	-	-	-	-	-	-	A	A	A	A	D	B	-	-	A	
Turpentine	B	A	A	A	-	C	-	A	B	C	B	B	A	A	A	D	A	D	B	A	A	D	B	A	A	A	D	-	D	D	D	D	A	
Urine	-	A	A	A	-	B	-	-	C	-	B	-	-	B	-	A	-	A	A	B	A	-	-	-	A	A	A	A	-	D	A	-	A	
Varnish	A	A	A	B	A	A	-	-	A	B	-	C	-	C	-	A	D	A	-	A	-	A	-	A	A	A	B	C	D	-	D	A	A	
Vegetable Juice	-	A	A	A	-	A	-	-	C	-	D	-	-	D	-	-	A	A	-	-	-	-	-	-	A	A	A	B	D	-	D	A	A	
Vinegar	A	A	A	A	D	A	A	B	B	C	D	A	A	A	A	B	A	A	A	A	B	A	A	A	A	A	C	-	B	A	C	A	A	
Water, Acid Mine	-	A	A	A	-	C	-	-	C	D	C	-	A	-	A	A	-	A	B	A	A	A	A	A	A	A	A	-	B	-	B	A	A	
Water, Distilled, Lab Grade 7	-	A	A	A	-	B	-	-	A	-	D	-	A	A	A	A	-	A	A	A	A	-	A	A	A	A	A	A	-	B	A	A	A	
Water, Fresh	A	A	A	A	-	A	-	-	A	C	B	D	A	A	A	A	D	A	A	A	A	D	A	A	A	A	A	A	-	B	A	A	A	
Water, Salt	-	A	A	B	-	B	-	-	B	C	D	-	A	-	A	A	-	A	A	A	-	A	A	A	A	A	A	-	B	A	A	A	A	
Weed Killers	-	A	A	-	-	C	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	B	-	C	-	-	A	
Whey	-	A	A	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	-	-	-	-	A	
Whiskey and Wines	A	A	A	B	A	D	-	-	B	B	D	D	A	A	A	B	A	-	A	A	A	B	A	-	A	A	A	A	B	A	A	A	A	
White Liquor (Pulp Mill)	-	A	A	-	-	-	-	A	D	-	C	-	A	A	A	A	-	A	A	A	-	A	-	-	A	A	A	A	-	A	-	-	A	
White Water (Paper Mill)	-	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	A	-	-	-	A	
Xylene	A	A	A	A	-	A	-	A	A	A	A	B	D	A	D	A	D	A	D	D	A	A	A	A	A	A	A	D	D	D	D	D	A	
Zinc Chloride	D	A	B	D	B	D	A	B	D	D	D	D	D	D	D	A	A	A	A	B	A	A	A	A	A	A	A	-	A	A	A	A	A	
Zinc Hydrosulfate	B	A	A	-	A	D	A	B	B	C	C	D	C	A	A	A	B	A	A	A	B	A	A	A	A	A	A	-	A	A	A	C	A	
Zinc Hydrosulphite	-	-	A	-	-	D	-	-	D	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
Zinc Plating																																		
Acid Chloride 60°C	-	-	D	-	-	-	A	D	-	-	-	-	-	-	-	A	A	A	D	-	A	-	-	-	A	A	A	-	A	-	-	-	A	
Acid Sulfate Bath 65°C	-	-	C	-	-	-	A	A	-	-	-	-	-	-	-	D	A	A	D	-	A	-	-	-	A	A	A	-	B	-	-	-	D	
Acid Fluoborate Bath R.T.	-	-	-	-	C	-	D	-	-	-	-	-	-	-	-	A	A	A	D	-	A	-	-	-	D	A	B	-	C	-	-	-	A	
Alkaline Cyanide Bath R.T.	-	-	-	-	A	-	A	A	-	-	-	-	-	-	-	A	A	A	A	-	A	-	-	-	D	A	A	-	A	-	-	-	-	A
Zinc Sulfate	B	A	A	A	A	D	A	B	B	C	C	D	C	A	A	A	A	A	A	B	A	A	A	A	A	A	A	-	A	A	A	C	A	

Chemical Resistance Legend

- A ▶ No Effect – Excellent
- B ▶ Minor Effect – Acceptable
- C ▶ Moderate Effect – Questionable
- D ▶ Severe Effect – Not Recommended
- ▶ No Information

Note

These recommendations are based upon information from material suppliers and careful examination of available published information. However, since the resistance of metals, plastics and elastomers can be affected by concentration, temperature, presence of other chemicals and other factors, this chart should be considered as general guide. The customer must determine the suitability of the material used in various solutions.

All recommendations assume ambient temperature unless otherwise stated.