CORROSION CHART

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CORROSION CHART

We STRONGLY urge corrosion testing!

“X”=Excellent to Very good resistance, “XX”=Good , “XXX”=Not recommended

PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Abietic acid	X	X		X	X	X	X
Acetanilide	X	X		X	X	X	X
Acetic acid	X	X	XX	XX	XXX	XX	XX
Acetic aldehyde	X	X		X	X	X	X
Acetoncyanhydrine	X	X		X	X	X	
Acetone	X	X		X	X	X	X
Acetonphenetidine	X	X		X	X	X	X
Acetonophenone	X	X		X	X	X	X
Acetylacetone	X	X		X	X		
Acetylchloride	X	X	XXX	X	X	X	XX
Acetylene (Cu < 65%)	X	X		X	X	X	X
Acetylsalicyclic acid	X	X		X	X	X	X
Acridine	X			X			X
Acroleine	X	X		X	XX	XX	X
Acrylonitrile	X	X		X	X	X	X

Adipic acid	X	X		X	X	X	X
Aktivin (chloramines T)							X
Alizarine	X			X	X	X	X
Allyl amine	X						X
Allyl chloride	X			X	X	X	X
Allyl sulphide							X
Allylic alcohol	X	X		X	X	X	X
Aluminium acetate	X	XX		XX	XX	XX	XX
Aluminium alkyle				X	X	X	X
Aluminium chlorate	X		X	X	X	X	X
Aluminium chloride	X	XX	X	X	XX	XX	XXX
Aluminium ethylate	X			X	X	X	X
Aluminium fluoride		XXX	XXX	X	X	X	
Aluminium formiate	X	X		X	X	X	X
Aluminium nitrate		X		X	X	X	X
Aluminum hydroxide	XXX	XX	XX	XX	XX	XX	XX
Aluminium silicofluoride				X	X	X	X
Aluminium sulphate	X	X		X	XXX	XXX	XX
Amines and amination	X			X	X	X	X
2-aminoanthrachinone				X	X	X	X
p-aminobenzene	X			X	XX		
m-aminobenzenesulfonic acid	X			X	X	X	X
p-aminobenzenesulfonic acid	X			X	X	X	X
Aminobenzoic acid	X	X		X	X	X	X
5-amino-2-oxybenzoic acid	X			X	X	X	X
m-aminophenole	X			X	X	X	X
2-aminopyridine				X	X	X	X
p-aminosalycyclic acid	X			X	X	X	X

hydroxide	XX	X		X	XX	XX	X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Ammonium acetate				X	X	X	X
Ammonium bicarbonate	X			XXX	XX	XXX	XX
Ammonium bromide	X			X	X	X	X
Ammoniumcarbonate	X			XX	XXX	XX	XX
Ammonium chloride	XX	X		XXX	XXX	XX	XXX
Ammonium cltrate	X	X		X	X	X	X
Ammonium difluoride					XX	XX	X
Ammonium diphosphate	X	X		X	X	X	X
Ammonium disulfite	X			X	X	X	X
Ammonium fluoride					XX	XX	XX
Ammoniumfluorsilicate				X	X	X	X
Ammonium formiate	X	X		X	X	X	X
Ammonium molybdate		X					X
Ammoniumonophosphate	X			X	X	X	X
Ammonium nitrate	X	X		XX	XXX	XXX	X
Ammonium oxalate	X			XX	XXX	XXX	XX
Ammonium perchlorate	X			X			X
Ammonium persulphate	X			XX	XXX	XXX	XX
Ammonium phosphate	X			XX	XX	XX	XX
Ammonium picrate				X	X	X	X
Ammonium rhodanide				X	X	X	X
Ammonium sulphamate	X	X		X	X	X	X
Ammonium sulphate	X	X		XX	XXX	XXX	XXX
Ammonium sulfite	X			XX	XXX	XXX	XX
Ammonium tungstate					XXX	XXX	X

Amyl acetate	X	X		X	X	X	X
Amyl alcohol	X	X		X	X	X	X
Amyl amine				X	X	X	X
Amyl chloride	X			X	X	XX	XX
Amyl mercaptane				X	X	X	X
Amyl nitrate							X
p-amyl phenole	X	X		X	X	X	X
Amyl propionate	X	X		X	X	X	X
Aniline	X	X		XX	XXX	XXX	XX
Aniline hydrochloride	X		X	X	XXX	XXX	XXX
Anis aldehyde	X	X		X	X	X	X
Anisidine	X			X	X	X	X
Anis oil	X	X		X	X	X	X
Anisol	X	X		X	X	X	X
Antimony chloride	X			X	X	X	XXX
Apple juice -pulp	X				X	X	X
Aqua regia	X	X	XXX	XXX	XXX	XXX	XXX
Arachic acid	X			X	X	X	X
Aralene	X	X		X	X	X	X
Argon	X	X		X	X	X	X
Arsenic					XX		X
Arsenic acid, pentoxide	X			XX	XXX	XXX	XX
Arsenous acids	X			X	X	X	X
Arsenic trioxide				X	X	X	X
Aspartic acid	X			X			X
Asphalt				X	X	X	X
Atmosphere (air)	X	X		X	X	X	X
Azobenzene	X	X		X	X	X	X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Bacitracine				X			X
Baking powder	X	X		X	X	X	X
Barium carbonate	X			XX		XX	XXX
Barium chlorate	X			X	X	X	X
Barium chloride	X	X	XX	X	XX	XX	XX
Barium cyanide	XXX				X	XXX	X
Barium hydroxide	XXX			XX	X	XX	X
Barium nitrate	X			XX	XX	XX	X
Barium oxide				X		X	X
Barium peroxide	XXX				XX	XX	XX
Barium sulphate	X	X		XX	XX	XX	XX
Barium (poly)-sulphide	XXX				XX	X	XX
Beer	X	X		X	X	X	X
Bees Wax	X	X		X	X	X	X
Beer Wort	X	X		X	X	X	X
Benzaldehyde	X			X	XX	XX	X
Benzamide	X	X		X	X	X	X
Benzanthrene	X			X	X	X	X
Benzine	X	X		X	X	X	X
Benzene	X	X		XX	X	X	XX
Benzene peroxide				X	X	X	X
Benzene-sulfonic acid	X			X	XX	X	X
Benzidine	X	X		X	X	X	X
Benzidline(-3-sulfonic acid)	X	X		X	X	X	X
Benzile	X	X		X	X	X	X
Benzilic acid				X	X	X	X

Benzoic acid	X	X	X	X	XX	XX
Benzoic acid anhydride			X	X	X	X
Benzoic acid sulfamide	X		X	X	X	X
Benzoine			X	X	X	X
Benzonitrile	X	X	X	X	X	X
1.4-benzoquinone			X	X	X	X
Benzotrichloride			X	X	X	
Benzotrifluoride			X	X	X	X
Benzylchloride	X		X	XX	XX	
Benzy acetate	X		X	X	X	X
Benzyl alcohol	X		X	X	X	X
Benzyl amine	X		X	X	X	X
Benzyl benzoate	X		X	X	X	X
Benzyl chloride	X		X	X	X	X
Benzyl phenol	X		X	X	X	X
Benzyl salicylate	X	X	X	X	X	X
Beryllium chloride	X		X	XX	XX	XX
Beryllium fluoride	X		X	X	X	X
Beryllium sulphate	X		X	X	X	X
Blood	X	X	X	X	X	X
Borax						X
Boric acid	XX	X	X	XX	XX	XX
Borneol	X	X	X	X	X	X
Bornyl acetate	X		X	X	X	X
Bornyl chloride	X		X	X	X	
Bornyl formiate	X		X	X	X	X
Boron phosphate			XXX	XXX	XXX	
Boron trifluoride					X	X

Brackish water					XX	XX	
Brake fluide	X	X		X	X	X	X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Brandy							X
Bromic acid					XXX	XXX	XXX
Bromine	X	XXX	XXX	XXX	XXX	XXX	XXX
Bromine trifluoride	XXX	XXX	XXX		X	X	X
Bromobenzene	X	X		X	X	X	X
Bromoform	X			X	X	X	X
1.3-butadiene							X
Butane				X	X	X	X
Butane diol	X			X	X	X	X
Butter	X	X					X
Buttermilk	X				XX	XX	X
Butyl acetate	X	X		X	XX	XX	XX
Butyl alcohol	X	X		X	X	X	X
Butylamine				X	X	X	X
Butyl benzoate				X	X	X	X
Butyl butyrate	X			X	X	X	X
Butyl chloride	X			X	X	X	XX
Butylene	X			X	X	X	X
n-butyl ether	X			X	X	X	X
n-butyl glycol	X			X	X	X	X
Butyl mercaptane				X	X		
Butyl phenol (tertiary)				X	X	X	X
Butyl phthalate	X			X	X	X	X
Butyl stearate	X	X		X	X	X	X

Butyric acid	X			X	XXX	XXX	XX
Cadium chloride	X		X	X	XX		X
Cadmium cyanide					XXX		
Cadmium sulphate	X			X	X	X	X
Caffeine	X	X		X	X	X	X
Calcium							X
Calcium acetate	X	X		X	X	X	X
Calcium arsenate							X
Calcium benzoate	X	X		X	X	X	X
Calcium bisulphate	X	X		X	XXX	XXX	X
Calcium bromide	X	X	X	X	XX	XX	XX
Calcium carbonate	X	X		XX	XX	XX	X
Calcium chlorate		X		X	XX	X	X
Calcium chloride	X	X	X	X	XX	XX	XX
Calcium chromate				X	X	X	X
Calcium fluoride	XXX		X	X	X	X	X
Calcium gluconate	X	X		X	X	X	X
Calcium hydride				X	X	X	X
Calcium hydroxide	X			XX	XXX	XXX	XXX
Calcium hypochloride	X	X	XX	XX	XXX	XXX	XXX
Calcium lactate	X	X		X	X	X	X
Calcium nitrate	X			X	XX	X	XX
Calcium oxalate	X			X	X	X	X
Calcium oxide				X	X	X	X
Calcium permanganate		X		X	X	X	X
Calcium peroxide							X
Calcium phosphate	X	X		X	X	X	X
Calcium rhodanide				X	X	X	XX

Calcium stearate	X	X		X	X	X	X
Calcium sulphate	X	X		XX	XX	XX	XX
Calcium sulphide					XX		X
Calcium sulphite	X	X			XX	XX	X
Calcium tungstate				X	X	X	X
Camphene	X	X		X	X	X	X
Camphor							X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Camphor	X	X		X	X	X	X
Camphotic acid	X	X		X	X	X	X
d-camphor sulfonic acid	X			X	XX	XX	XX
n-capric acid	X	X		X	XX	XX	X
E-caprolactame				X	X	X	X
Caproic acid	X	X		X	XX	XX	X
Caproic aldehyde	X	X		X	X	X	X
Caprylic acid	X			X	XX	X	X
Caprylic alcohol	X	X		X	X	X	X
Capsaicin				X	X	X	X
Carbazole	X	X		X	X	X	X
Carbitol	X	X		X	X	X	X
Carbolic acid	X	X	X	X	XX	XX	XX
Carbolineum	X	X		X	X	X	X
Carbon dioxide	XX	XX		X	XX	XX	X
Carbon monoxide	XX	XX		X	XX	XX	X
Carbon sulfide	X	X		X	X	XX	X
Carbon tetrachloride	X		X	X	X	X	X
Carnallite	X	X		X	X	X	X

Caro acid	X						
Carotene	X	X		X	X	X	X
Cesium chloride				X	X	X	XX
Cesium hydroxide					XX	XX	XX
Cellulose paints	X	X		X	X	X	X
Chloramine				X	X	X	X
Chloramphenicol	X	X					X
Chloranille	X	X			X	X	X
Chlordane				X	X		X
Chloric acid	X				XXX	XXX	XXX
Chlorinated water	X		XX	XX	XXX	XXX	XX
Chlorine	X	XX	XXX	XX	XX	XX	XX
Chlorine dioxide	X			XXX		X	XX
Chlorobenzene	X	X		XX	XX	XX	XX
Chlorobenzenetrifluoride				X	X	X	X
Chloroform	X	X		X	X	X	X
Chloronitrobenzenes	X	X		X	X	X	X
Chloronitrobenzoic acid	X	X		X	X	X	X
4-chloro-2-nitrophenol				X	X	X	X
Chlorophenol	X			X	X	X	X
Chlorophenoxyacetic acid	X			X	X	X	X
Chlorophylle	X	X		X	X	X	X
Chloropikrine	X			X	X	X	X
Chloroprene				X	X	X	X
Chlorosulfonic acid	X	X	XX	X	XX	XX	XX
Chlorotoluene	X	X		X	X	X	X
Chlorotrifluoroethylene				X	X	X	X
Chromic acid, oxide	X	X	X	XXX	XXX	XXX	XXX

Chromium chloride	X			X	XX		XX
Chromium fluoride	X					X	
Chromium nitrate		X					X
Chromium oxide, hydroxide	X	X		X	X	X	X
Chromium phosphate	X			X	X	X	X
Chromium sulphate	X			X	XX	XX	XX
Chromyl chloride	X	X		X	X	X	X
Citral	X	X		X	X	X	X
Citric acid	X		XX	X	XXX	XXX	XXX
Citronellal	X	X		X	X	X	X
Citronellol	X	X		X	X	X	X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Citrus fruit	X	X		X	XX	XX	X
Citrus oil	X	X		X	X	X	X
City gas	X	X		X	XX	XX	X
Cocaine	X			X	X	X	X
Codein salts	X			X	X	X	XX
Copper acetate	X	X		XX	XX	XX	X
Copper carbonate	X	X		XXX	XX	XX	XXX
Copper chloride	X			XXX	XXX	XXX	XXX
Copper cyanide							X
Copper nitrate	X			XX		XXX	XX
Copper oxide					X	X	
Copper sulphate	X	X		XX	XXX	XXX	XX
Creosote	X			XX		XX	XX
Cresol	X	X		X	X	XX	X
Croton aldehyde	X			X	X	X	X

Crotonic acid	X	X	X	X	X	X
Cumarine	X	X		XX	XXX	X
Cumarone, resin	X	X	X	X	X	X
Cumene	X	X	X	X	X	X
Cyanacetic acid	X	X				XX
Cyan amide		X	X	X	X	X
Cyanogen chloride	X		X	X	X	X
Cyanogen, Dicyanogen	X					X
Cyclohexane	X	X	X	X	X	X
Cyclohexanol	X	X	X	X	X	X
Cyclohexene	X	X	X	X	X	X
Cyclohexylamine				XX	XX	X
Cyclopentane, cyclopentadiene	X	X	X	X	X	X
Cystine	X	X				X
Deuterium oxide		X	X	X	X	X
Dextrine	X	X	X	X	X	X
Dextrose	X	X	X	X	X	X
Dibenzyle	X	X	X	X	X	X
Dibuthylphthalate	X	X	X	X	X	X
Dichloroethane				X	X	
Dichloroethylene	X	X	XX	X	X	X
Diethyl amine	XX	X		XX	XX	X
Dimenthyl aniline	X	X	X	X	X	X
Dimenthyl ether	X	X	X	X	X	X
Dioxane	X	X	X	X	X	X
Diphenyl	X	X	X	X	X	X
Diphenyl amine	X	X	X	X	X	X
Diphenylene oxide	X	X	X	X	X	X

Diphenylketone	X	X		X	X	X	X
DMDT	X	X		X	X	X	X
Ethane	X	X		X	X	X	X
Ethanol	X	X		X	X	X	X
Ethanolamine	X	X					X
Ether	X			XX		XX	XX
Ethyl acetate	X	X		XX	XX	XX	XX
Ethyl benzen	X	X		X	X	X	X
Ethylbutyrate	X	X		X	X	X	X
Ethyl chloride	X	X		X	X	X	X
Ethyl ether	X	X		X	X	X	X
Ethyl lactate	X	X		X	X	X	X
Ethylene	X	X		X	X	X	X
Ethylene bromide	X	X		X	X	X	X
Ethylenechlorhydrine	X	X		X	X	X	X
Ethylen chloride	X	X		X	X	X	X
Ethylenecyanhydrine	X	X		X	X	X	X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Ethylenediamine	X			XX			X
Ethylenedichloride	X			XX		XXX	XXX
Ethylenglycol	X			X	XX	XX	XX
Ethyleneimine							X
Ethyl nitrite							X
Ethyleneoxide	X	X		X	X	X	XXX
Ethyl stearate	X	X		X	X	X	X
Ethyl sulphuric acid	X			X			
Extremely pure water	X	X	X	X	X	X	X

Fatty acids	X	X		X	XX	XX	X
Fatty alcohol	X	X		X	X	X	X
Fats and waxes	X	X		X	X	X	X
Ferric chloride	X	X	XXX	XXX	XXX	XXX	XXX
Ferric sulphate	X	X	XX	XXX	XXX	XXX	X
Ferrous chloride	X	X		XX	XXX	XXX	XXX
Ferrous sulphate	X	X		XX	XXX	XXX	XX
Fluoric acid	XXX	XXX	XXX	XX	XX	XX	XXX
Fluorhydrocarbon	XX	XX		X	X	X	X
Fluorine	XXX	XX			XX	XX	XX
Fluorocarbon				X	X	X	XX
Halogen compounds	XX			X	XX	XX	XX
Fluorochlorocarbon				X	X	X	XX
Metaldehyde=formd	X	X		XX	X	X	X
Formamide	X	X		X	XX	X	X
Formic acid	X	X	X	X	XXX	XXX	XX
Furfurol	X	X		X	XX	XX	XX
Gallic acid							X
Gelatin	X	X		X	X	X	X
Glacial acetic anhydride					X		
Gluconic acid	X	X		X	X	X	X
Glucose	X			X	X	X	X
Glutamic acid	X	X			XX	X	X
Glycerine	X	X		X	X	X	X
Hemp and jute	X			X	X	X	X
Heptane	X	X		XX	X	X	XX
Hexachloroethane	X			XX	XX	XX	XX
Hydrazine				XX	XXX	XXX	XX

Hydrazine sulphate	X		XX	XX	XXX	XXX	
Hydrobromic acid			XX				X
Hydrochloric acid (<1%)	X	XX	X	XX	XX	XX	XXX
Hydrochloric acid	X	XX	X	XXX	XXX	XXX	XXX
Hydrocyanic acid	X	X		XX	XXX	XXX	XXX
Hydrogen							XX
Hydrogen bromide	X			XX	XX		XXX
Hydrogen lodide, lodic acid	X	X		X	XX	XX	XX
Hydrogen peroxide	X	XXX	X	XXX	XX	XXX	X
Hydrogen sulphide	X	X			XX		X
Hydroquinone	X	X		X	X	X	X
Impregnating oils	X	X		X	X	X	X
Indol	X	X		X	X	X	X
Iodine	X	XX	XX	XX	XX	XX	XX
Iodoform	X	X		X	X	X	
Iron nitrate	X				XXX	XXX	X
Iron phosphate							X
Isatine, derivates	X	X		X	X	X	X
Kerosene	X			X		X	
Lactic acid	X	X	X	XX	XXX	XXX	XX
Lactose	X	X		X	X	X	X
Lead acetate	X			XX	XX	XX	XX

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Lead arseniate	X			X	X	X	X
Lead baths (electrolyt.)						X	
Lead bromide				XX			XX
Lead carbonate	X			X	X	X	X

Lead chloride	X			X		X	X
Lead chromate	X			X	X	X	X
Lead dioxide	XX			X	X	X	X
Lead (molten)					XXX	XXX	XX
Lead nitrate	X			X	X	X	X
Lead nitride	X			X	X	X	X
Lead oxide	XX			XX			XX
Lead sulphate				X	X	X	X
Lead sulphide					XXX		XX
Lead tetraacetate				X			X
Lead trinitroresorcinate				X		X	X
Lecithine	X	X		X	X	X	X
Levulic acid	X			X	XX	XX	XX
Lignite tar				X	X	X	X
Lime milk							X
Limonene	X	X		X	X	X	X
Linseed oil					X	X	X
Liqueur							X
Lithium carbonate				X	X	X	X
Lithium chloride	X	XX	XX	X	XX	XX	XX
Lithium hydride					XX		X
Lithium hydroxide					XX	X	X
Lithium (molten)	X				XX	XXX	XX
Lithium sulphate	X	X		X	X	X	X
Litopone					X		X
Lysoform							X
Lysol							X
Magnesium bisulphate	XX	XX		XX	XX	XX	XX

Magnesium carbonate	X	X		X	X	X	X
Magnesium chloride	X	X	X	X	XX	XX	XX
Magnesium fluoride					XX	XX	XX
Magnesium hydroxide	X			XX	X	XX	XX
Magnesium (molten)							XX
Magnesium nitrate	X	X		XXX	XXX	XXX	X
Magnesium oxide	X	XX		X	X	X	X
Magnesium oxychloride	X	X		X	X	X	XX
Magnesium silicofluoride	XXX					XX	X
Magnesium sulfite	X	X		X	X	X	X
Magnesium sulphate	X	X		X	X	X	X
Maleic acid	X	X		X	X	X	X
Malic acid	X	X		X	X	X	X
Malonic acid	X	XX		XX	XX	XX	X
Malt		X		X	X	X	X
Maltose	X	X		X	X	X	X
Manganese dioxide	XX	X			XX	XX	X
Manganese sulphate	X	X		X	X	X	X
Manganese chloride	X	X			XX	XX	XX
Manganous chloride							X
Meat							X
Menthol	X	X		X	X	X	X
Mercaptane	X	X		X	XX	XX	X
Mercury	X	XX		XX	X	XXX	X
Mercury chloride	X		X	XXX	XXX	XXX	XXX
Mercury cyanide					XXX	XXX	X
Mercury nitrate					XXX	XXX	X

“X”=Excellent to Very good resistance, “XX”=Good , “XXX”=Not recommended

PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Mercury salts	X						
Methane	XX	XX		X	XX	X	XX
Methanol	XX	XX	X	X	XX	XX	XX
Methyl acetate	X	X		X	XX	X	XX
Methyl alcohol					X	X	X
Methyl aldehyde							X
Methyl amine		X			XX	XXX	XX
Methyl bromide	X			X	X	X	XX
Methyl chloride	X	X		XX	XX	XX	XX
Methyl formiate		X		X	X	X	X
Methylene chloride	X	X		X	X	X	XX
Morpholine	X			X	X	X	X
Naphtaline	X	X		X	X	X	X
Naphtionic acid	X	X		X	X	X	X
Naphtol	X	X		X	X	X	X
Naphtylamine	X	X					X
Naphtylaminesulfonic acid	X						X
Nickel chloride	X	X	X	XX	XXX	XXX	XXX
Nickel nitrate	X	X		XX	XX	XX	X
Nickel salts							X
Nickel sulphate	X	X		XX	XX	XXX	XX
Nitric acid	X	XX	X	XXX	XXX	XXX	X
Nitric acid, strong conc.			X				XX
Nitrobenzene	X	X		X	X	X	X
Nitrogen	X	X		X	X	X	X
Nitrous acid	X			XXX		XXX	XXX
Novocaine							X

Oak extract	X	X		X	X	X	X
Oleic acid					XX	XX	X
Oleum	XXX	XXX		XXX	XX	XXX	XXX
Oxalic acid	X	XX	X	X	XXX	XX	XX
Ozone	X	X			XX	XX	X
Palm oil acid					X	X	X
Paraffine					X	X	X
Peanut butter				X	X	X	X
Perchlorethylene	X	X		X	X	X	X
Perchloric acid			X				XXX
Petrol, Natural gas	X			X	XX	XX	X
Petroleum							X
Phenol	X	X	XX	X	XX	XX	XX
Phosphoric acid	X	XX	XX	XXX	XXX	XXX	XXX
Phtalic acid	X	X		XX	XX	XX	X
Picric acid	X			XXX	XXX	XXX	XXX
Potassium acetate	X	X		X	X	X	X
Potassium bisulfite	X				XX	XX	X
Potassium bromide	X	X		XX	XXX	XXX	XX
Potassium carbonate	XXX			XX	XX	XX	XX
Potassium chlorate	X	X		XX	XXX	XXX	XX
Potassium chloride	X	XX	X	X	X	X	XX
Palm oil acid					X	X	X
Paraffine					X	X	X
Peanut butter				X	X	X	X
Perchlorethylene	X	X		X	X	X	X
Perchloric acid							XXX
Petrol, Natural gas	X			X	XX	XX	X

Petroleum							X
Phenol	X	X		X	XX	XX	XX
Phosphoric acid	X	XX		XXX	XXX	XXX	XXX
Phosphoric acid anhydride							X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Phtalic acid	X	X		XX	XX	XX	X
Picric acid	X			XXX	XXX	XXX	XXX
Potassium							X
Potassium acetate	X	X		X	X	X	X
Potassium bisulfite	X				XX	XX	X
Potassium bisulphate							XX
Potassium bitartrate							XX
Potassium bromide	X	X		XX	XXX	XXX	XX
Potassium carbonate	XXX			XX	XX	XX	XX
Potassium chlorate	X	X		XX	XXX	XXX	XX
Potassium chloride	X	XX		X	X	X	XX
Potassium nitrate			X				
Silver nitrate			X				
Sodium aluminium fluoride		XX		X	X	X	X
Sodium aluminium sulphate	X			X	XX	XX	XX
Sodium arseniate, arsenite				X	X	X	X
Sodium benzoate	X	X		X	X	X	X
Sodium bicarbonate		X		XX	X	X	X
Sodium bisulfite	X	X		XX	XX	XX	XX
Sodium bisulphate	X	XX	x	XX	XX	XX	XX
Sodium borate	XX	X		X	XX	X	XX
Sodium boron hydride							X

Sodium bromate	X						X
Sodium bromide	X	X		X	X	X	XX
Sodium bromite					X		X
Sodium carbonate	XX	XX	X	X	XX	XX	X
Sodium chlorate	X	X	X	XX	XX	XX	XXX
Sodium chloride	X	X	X	X	XX	XX	XX
Sodium chlorite	XX	X		XXX	XX	XX	XX
Sodium chloroacetate	X				X	X	X
Sodium chromate	X	X		X	X	X	XX
Sodium citrate	X			XXX	XX		X
Sodium cyanate		X			XX		X
Sodium cyanide	XX	XX		XX	XX	XXX	XX
Sodium dichromate	XX	XX		XXX	X	X	
Sodium ethylate					X	X	X
Tetraacetate				X	X	X	X
Sodium fluoroacetate					X	X	X
Sodium fluorophosphates							X
Sodium formate	X		X	X	X	X	X
Sodium glutamate				X	X	X	X
Sodium gydrochloride	XX	XX		XX	XX	XX	XX
Sodium hydrogen sulphide			X	X			X
Sodium hydroxide	XXX	XX	XX	XX	XX	XX	XX
Sodium hypochlorite	XX	XX	XX		XX	XX	XX
Sodium iodide	X	X	X		XX	X	XX
Sodium nitrate	X	X		XX	XX	XX	X
Sodium perborate	X			XX	XX	XX	XX
Sodium perchlorate	XX	XX			X	X	X
Sodium peroxide		XXX	X	XX	XX	XX	XX

Sodium phosphate	X			XX	XX	XX	X
Sodium and potassium alloys	X	XX		X	X	XX	XX
Sodium pyrosulfite						X	X
Sodium salicylate	X			X	X	X	XX
Sodium silicate	X		X	X	X	X	X
Sodium sulfite	X	X		XX	X	XX	XX
Sodium sulphate	X	XX	X	XXX	XX	XXX	XX
Sodium sulphide	XX	X	X	XX	XX	XX	XX
Sodium thiosulphate		X		X	X	X	X

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PROCESS FLUID	Tantalum	Titanium	Zirconium	Alloy 276	Nickel 200	Monel 400	SS316
Soft soap, suds							X
Stannic chloride			X				
Stannous chloride	X						XX
Stearic acid					X	X	X
Succinic acid	X	X	X	X	X	X	X
Sugar solution					X	XX	X
Sulfamic Acid			X				
Sulphur	X	X		XX	XX	XX	X
Sulphur, boiling							XX
Sulphur chloride (dry)	X			XX		XXX	XXX
Sulphur dioxide	X	XX		XXX	XX	XX	XX
Sulphuric acid	X	XX	XX	XXX	XXX	XXX	XXX
Sulphurous acid	X		XXX	XX		XXX	XX
Sulphurous chloride	X	XX			X	X	XX
Tannic Acid			X				
Tartaric acid			X		XX	XX	XX
Tetrachloroethane			XX				XX

Tin chloride	X	X		X	XX	XX	XX
Tin, molten, 300 Degrees C							X
Tin, molten, 500 Degrees C							XXX
Toluene					X	X	X
Trichloracetic acid							XXX
Trichloroethylene	X	XX	XX	X	X	X	XX
Tricresylphosphate				X	X		
Trisodiumphosphate			XX				X
Turpentine					X	X	X
Uranium fluorides	XXX			XX	X	X	
Urea	X	X	X	X	XX	XX	X
Uric acid	X		X	X	X	X	X
Vegetal tar, Charcoal	X			X	X	X	X
Vinyl chloride	X			XX	XX	XX	
Wash oil				X		X	X
Xylene					XX	XX	X
Yeast	X	X		X	X	X	X
Zinc chloride	XX	X	X	X	X	XX	XXX
Zinc sulphate	X			XX		XX	XX

**This chart is intended to be used only as guide and provides only overall comparison of the corrosion resistance of the metals/alloys in the chemicals noted. Service conditions (concentrations, temperatures, tramp chemical contaminants, etc) can vary greatly. We strongly urge corrosion testing under anticipated operating conditions. Contact us for corrosion coupons. Tricor Metals assumes no responsibility for the data contained nor for any corrosion issues that arise due to use of this information. **