CORROSION RESISTANCE CHART

Warning: Corrosion rates may vary widely with factors such as concentration, temperature, abrasion and impurities of product. Serious injury may occur with contact of incompatible liquids with solids.

Compatibility Ratings

A = Excellent B = Good C = Fair to poor D = Poor Recommedation X = Not recommended - = No data available

Temperature Ratings:

1 = OK to 80° F 3 = OK to 95° F
2 = OK to 125° F 4 = OK to 205° F
All others listed at ambient temperature

	Epoxy		Plastics														Elastomers										Metals										Non-Metals		
CHEMICAL	Vinyl Ester VR-1	Epoxy EX-1	ABS Plastic	Acetal (Delrin)	CPVC	Epoxy	Hytrel®	HDPE	LDPE	Noryl®	Nylon	Polycarbonate	Polypropylene	PPS (Ryton)	PTFE (Teflon)	PVC	PVDF (Kynar®)	Buna N (Nitrile)	EPDM	Hypalon®	PCTFE	Natural rubber	Neoprene	Santoprene	Silicone	Tygon® (R-3603)	Viton®	304 stainless steel	316 stainless steel	Aluminum	Brass	Bronze	Carpenter 20	Cast Iron	Copper	Hastelloy-C®	Titanium	Carbon graphite	Ceramic Al_2O_3	Ceramic magnet
Acid Sulfate Bath 150° F	-	-	-	-	D	D	-	-	-	A	D	-	A	-	A	D	-	A	-	-	-	-	B	-	-	-	A	-	C	-	-	-	-	-	-	A	A	-	-	-
Alkaline Cyanide Bath R.T.	-	-	-	-	A	A	-	-	-	A	A	-	A	-	A	A	-	A	-	-	-	-	A	-	-	-	A	-	A	-	-	-	-	-	-	A	A	-	-	-
Plating Solution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrome	-	-	-	X	-	-	-	-	-	-	-	-	X	X	A	-	B	X	C	-	A	-	X	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	-	-	-	A	-	-	-	-	-	-	-	-	A	X	A	-	B	B	-	-	A	-	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	A	-	A	-	C	A	-	-	B	-	A	-	-	-	-	-	-	-	-	-	-	-
Platinum Plating Solution	A^2	A^4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-
Polyethylene Imine	A^2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	B	-	-	A	-	-	-	-
Polyvinyl Acetate Emulsion	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	A	-	A	-	A	-	C	A	-	-	-	-	B	-	-	-	-	B	-	-	-	-	-	-
Potash (Potassium Carbonate)	-	-	A	B	A	A	D	B	A^1	A	A	-	A	-	-	A	A	A	A^1	-	-	A	A	-	-	A	A	B	B	D	-	B	B	C	B	B	A	A	D	-
Potassium Acetate	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	A	B	A	-	A	-	B	A	-	-	X	-	B	B/10%	-	-	-	A	-	-	-	-	-	-
Potassium Aluminum Sulfate	A^4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	A	-	-	-	-	-	-	-
Potassium Bicarbonate	A^2	A^4	A	-	A	A	-	B	A	A^1	A^1	-	A	A	A	A	A	A	A	-	A	A	A	A	A^1	A	A	B	A/30%	D	-	B	B	A	B	B	A	A	A	A
Potassium Bisulfite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	A	-	A	-	-	-	A	-	B/10%	B/10%	-	-	-	-	-	-	-	-	-	-
Potassium Bisulfate	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	A	A	-	-	A	-	A	-	-	-	A	-	A/10%	A/10%	-	-	-	X	-	B	-	-	-	-
Potassium Bromide	A^2	A^4	A^1	A	A	A	-	B	A	A^1	A^1	A^1	A	A	A	A	A	A	A^1	-	A	A	A	A	A^1	B	A	B	B/60% 212°	A	-	B	B	B/80% 212°	B	A	A	A	C	A
Potassium Carbonate (Potash)	A^2	A^4	-	B	-	-	-	-	-	-	-	-	A	A	A	-	A	A	A	-	-	-	A	A	-	-	A	-	B	X	-	-	A	B	-	A	-	-	-	-
Potassium Chlorate	A^3	-	A	B	A	A	-	B	A^1	A^1	C^1	A^1	A	A	A	A	A	A^1	A^1	-	A^2	-	A	A	B	B	A	B	A/60%	B	-	B^1	B	B	B^1	A	A	A^2	B	-
Potassium Chloride	A^4	A^4	A	A	A	A	B	A	A^1	A^1	A^1	A	A	A	A	A	A	A^1	A^1	A	A	A	A	A	A	A	A	B^1	A^1	D	D	B	A	A	B	A	A	A	-	-
Potassium Chromate	-	-	-	C	A	C	-	-	A	A^2	B	-	A	-	A^1	A	A	A^1	A^2	-	A/40%	B	A	A	-	B	A	B^1	A	A	-	B^1	B	A	-	A	-	A	B	-
Potassium Copper Cyanide	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	-	A	A	-	A	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium Cyanide Solutions	-	-	A	C	A	A	B	-	A	A^1	A^1	-	A	A	A	A	A	A^1	A^1	A	A	A	A	-	A	A	A	B^1	B^1	D	D	D	B	B	D	B	A	A	D	-
Potassium Dichromate	A^4	A^4	B^1	A	A	C	C	B	A	A^1	B^1	A^1	A	A	A	A	A	A^1	A^1	A	A	B	A	A	A	-	A	B	B^1	B	-	B^1	B	A	B	B	A	A	B	A
Potassium Ferricyanide	-	-	B	B^1	A	A^1	-	-	A^2	A^2	B^1	-	A^2	-	A^2	A	A^2	D	A	A^1	A^1	B	A^1	-	-	B	A	B^1	B^1	B^2	-	B^2	B	C	B	B^2	A^2	A^2	B	A
Potassium Ferrocyanide	A^4	A^4	-	-	B	A	-	-	A^1	A	B^1	-	A	-	A	A	A	D	A	-	A	A	A	-	-	B	A	B	B	B^1	-	B^1	B	C	B	B	A	A	-	A
Potassium Gold Cyanide	A^1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-
Potassium Hydroxide (Caustic Potash)	A^2	A^4	A	A	A	A	D	A	A	A^1	C^1	D	A	A	A	A^1	A/150°	B^1	A^2	A	B	B	B	B	C	B	B	B	A^1	D	D	D	B	B^2	B	B^1	D	C	D	A
Potassium Hypochlorite	-	-	-	-	-	-	-	-	C^1	-	B^1	-	-	A	A^2	B^1	A^1	A^1	A^1	A^1	-	C^1	B^2	-	-	B^1	-	C^1	B	D	-	D	B	A	D	B^2	A^1	-	D	-
Potassium Iodide	-	-	B	-	A	-	-	B	B^1	-	A^1	-	A^2	A^2	A^2	A^2	A^2	A^1	A	A^2	A	B	A	A	-	B	A	A^1	A^1	B^1	-	A^1	A	A	A^1	A^2	A^1	A^1	B	-
Potassium Nitrate	A^4	A^4	B	A	A	A	B	B	A	A^1	B^1	A^1	A	A	A	A	A	A^2	A	A	A	A	A	A	A	A	A	B	B/80% 212°	A/80%	B	B^1	B	A	A	B^1	A	A	B	-
Potassium Nitrite	-	-	-	-	-	-	B	-	-	-	-	-	A/70°	-	A	-	-	A	A	-	A	-	A	A	-	-	A	-	B	B	-	-	-	B	-	B	-	-	-	-
Potassium Oxalate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A^2	-	-	-	-	-	-	-	-	-	-	-	-	B	B^1	B^1	-	A^1	B	A	B	A^1	A^1	A^1	A	-
Potassium Permanganate	A^2	-	B^1	A	A^1	A	D	A	A	A	D	A^2	A^1	A	A	A^1	A	C	A	-	A	A^1	A	A	-	B	A	B^1	B	A/10%	-	A^1	B	A	A	A^1	A	B^1	A	-
Potassium Persulfate 0-10%	A^4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	A	-	-	-	A	-	-	-
Potassium Persulfate 10-100%	A^4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	B	-	-	-	-	-	-	-
Potassium Phospate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	A	-	A	-	A	-	-	-	A	-	B/30%	X	-	-	-	X	-	B	-	-	-	-
Potassium Pyrophosphate	A^2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-
Potassium Silicate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	A	-	A	-	A	-	-	-	A	-	B	B	-	-	-	B	-	B	-	-	-	-
Potassium Sulfate	-	-	B	B	A	A	B	B	A^2	A	A^1	A^1	A	A	A	A^2	A	A^2	A^1	A	A^1	A	A	A	A	A	A^2	B^1	A	B	D	A^1	A	A	B	A	A	A	A	A
Potassium Sulfide	-	-	B	-	A^2	-	-	-	A^2	A	A	-	A	A	A	A^2	A	A^2	A^1	B	A^1	A	A	-	A	-	A	B	B	D	-	D	A	B	D	B	A	A	A	-

Warning: Halogenated solvents such as 1,1,1, Trichloroethane and Methylene Chloride should not be used in Aluminum equipment. A violent explosion could occur with halogenated hydrocarbons such as Carbon Tetrachloride, Chloriform, Dichlorethylene, Methyl Chloride, Methylene Chloride, and Trichlorethylene.

Data shown is based on information that has not been independently verified. We do not guarantee its accuracy or imply or state the accuracy of these charts. Data is limited to the concentrations and temperature specified. Assume ambient temperatures where temperature restrictions are not indicated.