جدول مقاومت شیمیایی مواد + : عالی 0 : قابل استفاده در شرایط خاص - : ضعیف خالی : آزمایش نشده

Pumped medium			GG-25	GGG-40;GGG-40.3	GS-C 25	ERN	Ni-Resist D2	NORIHARD® NH 153	NORILOY® NL 25 2	1.4008	1.4308	1.4408	1.4500	NORICID® 9.4306	NORIDUR® 9.4460	NORICLOR® NC 24 6	G-CuAl 10 Ni	Special materials / remark
Acetic acid		CH_3COOH																heed isocorrosion curves!
Concentration	10% ,cold		-	-	-		-		-	O	+	+	+		+	+		
	100 °C		-	-	-		-		-	O	+	+	+		+	+		
	40% ,cold		-	-	-		-		-	O	+	+	+		+	+		
	100 °C		-	-	-		-		-	-	-	+	+		+	+		
	80% ,cold		-	-	-		-		-	O	+	+	+		-	+		
	100 °C		-	-	-		-		-	-	-	+	+		+	+		
Acetic aldehyde		CH_3-CHO	-	-	-					+	+	+	+		+	+	+	inflammable
Acetic anhydride		$(CH_3-CO)_2O$	-	-	-		-			-	O	O	+		O	O	-	
Acetic pentylester		$CH_3CaOC_5H_{11}$	-	-	-		+			+	+	+	+		+	+	+	inflammable
Acetone		CH_3COCH_3	+	+	+		+			+	+	+	+		-	+	+	inflammable
Acrylic acid		$CH_2=CHCOOH$					-			-	+	+	+		-	+	-	Polymerized, light
Acrylonitrile		$CH_2=CHCN$	+	+	+		+			+	+	+	+		-	+	+	
Alkazid solution,	Cold		+	+	+		+			+	+	+	+		-	+	O	
	hot		-	-	-		+			O	+	+	O		+	+	-	
Aluminum acetate		$Al(CH_3COO)_3$	-	-	-		O			+	+	+	O		-	+	+	
Aluminum chloride		$AlCl_3$	-	-	-		O			-	-	O			-	+	O	
Aluminum hydroxide suspension			-	-	-	-	-	+	O								-	to 80 °c
Aluminum sulphate		$Al_2(SO_4)_3$	-	-	-		O			O	O	+	+		-	+	O	
Ammonia, cold		NH_3	-	+	+		+			+	+	+	+	+	-	+	-	
Ammonia water, boiling		NH_4OH	-	-	-		O			O	O	+	+	-	-	+	-	
Ammonium carbonate		$(NH_4)_2CO_3$	-	-	-		O			O	+	+	+		-	+	-	
Ammonium chloride		NH_4Cl	-	-	-		+			-	-	+	+		-	+	-	
Ammonium hydroxide		NH_4Cl																See ammonia
Ammonium nitrate, cold		NH_4NO_3	-	-	-		O			-	+	+	+	O	-	+	-	
Ammonium oxalate		$(COONH_4)_2$	-	-	-		O			+	+	+	+		-	+	-	
Ammonium sulfate		$(NH_4)_2SO_4$	-	-	-		O			O	+	+	+		-	+	-	
Ammonium sulfite		$(NH_4)_2SO_3$	-	-	-		O			O	+	+	+		-	+	-	
Ammonium thiocyanate, cold		NH_4SCN	-	-	-		O			O	+	+	+		-	+	-	
Amyl acetate		$CH_3COOC_5H_{11}$																See acetic pentylester, inflammable
Amyl alcohol		$C_5H_{11}OH$																See pentanol, inflammable
Aniline(=aminobenzene)		$C_6H_5NH_2$	O	O	O		+			+	+	+	+		+	+	O	Temperature must be known, inflammable
Asphalt			+	+	+	+	+	+	+	+	+	+	+		+	+	+	
Barium chloride		$BaCl_2$	-	-	-		O			-	-	O	O		+	+	O	
Bauxite suspension			-	-	-	-	-	+	O								-	To 80 °c
Beer			O	O	O		O			+	+	+	+		-	+	+	
Beer mash			+	+	+					+	+	+	+	+	+	+		for increased degrees of purity use 1.4408/9.4460
Beer wort			+	+	+					+	+	+	+	+	+	+		
Benzenesulfonic acid		$C_6H_5SO_3H$	-	-	-		-			-	O	+	+		+	+	O	
Benzoic acid, aqueous		C_6H_5COOH	-	-	-		-			+	O	+	+		+	+	-	
Benzol		C_6H_6	+	+	+		+			+	+	+	+		+	+	+	inflammable
Benzyl acetate (=benzoic ether)		$CH_3-COO-CH_2-C_6H_5$	O	O	O		O			+	+	+	+		+	+	O	inflammable
Black liquor																		Precise analysis is necessary
Bleaching liquor																		see sodium hypochlorite
Bonderizing solution			-	-	-		-			-	O	+	+		+	+	-	
Boric acid, aqueous		H_3BO_3	-	-	-	-	-			O	O	+	+		+	+	O	
Brine (anolyte with>30 mg cl_2/l)			-	-	-		-	-	-	-	-	-	-	-	O	O	-	titanium, hard rubber(contact ASK)
Butadiene, liquid		$CH_2=(CH_2)_2=CH_2$	O	O	+		+			+	+	+	+		+	+	+	inflammable
Butane (liquefied gas)		C_4H_{10}	O	O	+		+			+	+	+	+		+	+	+	inflammable
Butanol(Butanol 1)		$C_2H_5(CH_2)_2OH$	O	O	O		+			+	+	+	+		+	+	+	inflammable
Butyl acetate		$CH_3COOC_4H_9$	O	O	O		+			+	+	+	+		+	+	O	inflammable
Butyric acid		$CH_3-CH_2-CH_2-COOH$	-	-	-	-	-	-	-	O	O	+	+		+	+	O	
Calcium bisulfite base		$Ca(HSO_3)_2$	-	-	-		-			-	O	+	+		+	+	O	
Calcium chloride		$CaCl_2$	-	-	-		-		O	-	-	-	O		O	O	O	hard rubber, titanium, Hastelloy
Calcium hydroxide		$Ca(OH)_2$	O	O	O		+			O	+	+	+		+	+	-	
Calcium hypochloride		$Ca(OCl)_2$	-	-	-		-			-	-	-	O		O	O	-	hard rubber, titanium, Hastelloy C
Calcium nitrate		$Ca(NO_3)$	-	-	-		+			+	+	+	+		+	+	-	
Calcium sulfate suspension		$CaSO_4$ + solid matter	-	-	-	O	-	O	O	O	-	-	-		O	O	-	
Carbon dioxide, aqueous solution		H_2CO_3	-	-	-		-			+	+	+	+		+	+	O	
Carbon disulfide		CS_2	+	+	+		+		+	+	+	+	+	+	+	+	-	inflammable
Carbon tetrachloride		CCl_4	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	anhydrous and acid-free
Caustic lime		$Ca(OH)_2$																see calcium hydroxide
Caustic potash		KOH																see potassium hydroxide
Caustic soda		NaOH																see sodium hydroxide
Chlorethane (ADIP)		C_2H_5Cl	+	+	+		+			+	+	+	+		+	+	+	only, if anhydrous
Chlorine,	dry	Cl_2	O	+	+		+			+	+	+	+		+	+	-	≤ 30 °C
	moist		-	-	-		-			-	-	-	-		-	-	-	Hard rubber (≤80 °C), titanium, Hastelloy C (≤50 °C)
Chlorobenzene		C_6H_5Cl	O	O	O		O			O	O	O	+		+	+	O	inflammable
Chloroform		$CHCl_3$	O	+	+		+			+	+	+	+		+	+	+	anhydrous and acid-free
Chlorosulfonic acid, aqueous solution		$SO_2(OH)Cl$	-	-	-		-			-	-	-	-		-	-	-	hstelloy B
Chromid acid, pure		CrO_3																heed isocorrosion curves!
Concentration	10% ,cold		-	-	-		-		+	+	+	+	+	+	+	+	-	
	boiled		-	-	-		-		O	-	-	-	+	+	+	+	-	
	50% ,cold		-	-	-		-		-	-	-	O	O	+	O	O	-	
	boiled		-	-	-		-		-	-	-	-	O	O	O	O	-	Si-cast iron
+ H_2SO_4	cold		-	-	-		-		-	-	-	O	+	+	+	+	-	
	boiled		-	-	-		-		-	-	-	-	-	-	-	-	-	Si-cast iron
Citric acid, aqueous solution		$(CH_2COOH).C(OH).COOH$	-	-	-	-	-	-	-	O	O	+	+	O	+	+	O	
Cooking lye (calcium bisulfate solution)		$Ca(HSO_3)_2$	-	-	-		-	-	-			+	+		+	+		
Cooper sulfate		$CuSO_4$	-	-	-		-			O	O	+	+		+	+	O	
Cooper sulfate + 4% H_2SO_4			-	-	-		-			-	O	O	+		+	+	-	

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Pumped medium			GG-25	GGG-40;GGG-40.3	GS-C 25	ERN	Ni-Resist D2	NORIHARD® NH 153	NORILOY® NL 25 2	1.4008	1.4308	1.4408	1.4500	NORICID® 9.4306	NORIDUR® 9.4460	NORICLOR® NC 24 6	G-CuAl 10 Ni	Special materials / remark
Cresol		$C_6H_4(CH_3)OH$	O	O	O		O			+	+	+	+		+	+	+	
Cyclohexanol		$(CH_2)_5CHOH$	O	O	+		-			+	+	+	+		+	+	+	inflammable
Cyclohexanone		$(CH_2)_5CO$	O	O	-		-			+	+	+	+		+	+	+	inflammable
Dichlor ethylene, anhydrous		$CHCl=CHCl$	+	+	-		-			+	+	+	+		+	+	+	
Dichloro benzene		C_6H_4Cl	O	O	O		O			O	O	O	+		+	+	O	inflammable
Diethanolamine (DEA)		$(C_2H_5)_2NCH_2CH_2OH$	+	+	-		-				+	+	+	+	+	+	-	for reasons of purity: 1.4408/9.4460
Dimethyl formamide		$HCON(CH_3)_2$	O	O	-		-			+	+	+	+		+	+	-	inflammable
Dimethyl terephthalate(DMT)		$C_6H_4(COOCH_3)_2$	-	-	-		-			O	+	+	+		+	+	O	melted
Dinitrobenzene, aqueous		$C_6H_4(NO_2)_2$	-	-	-		-			O	+	+	+		+	+	-	
Dye bath (basic or acid)			O	O	O	O	O	O	O	O	O	O	O	O	+	+	-	Contact ASK for combination
Ether (diethyl ether)		$(C_2H_5)_2O$	+	+	+		-			+	+	+	+		+	+	+	highly inflammable
Ethyl acetate		$CH_3COOC_2H_5$	+	+	+		-			+	+	+	+		+	+	+	
Ethyl alcohol (ethanol)		C_2H_5OH	O	+	+		-			+	+	+	+		+	+	+	inflammable
Ethlamine		$C_2H_5NH_2$	-	-	-		O			+	+	+	+		+	+	-	
Ethylene, liquid		$CH_2=CH_2$	-	-	-		-			-	+	-	-		-	-	-	unalloyed cold-tough cast steel, must be cold-tough at-140 °C
Ethylene carbonate		$(CH_2)_2CO_3$	+	+	+		-			+	+	+	+		+	+	+	
Ethylene glycol		CH_2OH-CH_2OH	+	+	+		+			+	+	+	+		+	+	+	
Ethylene oxide		$(CH_2)_2O$	O	+	+	+	+	+	+	+	+	+	+		+	+	+	inflammable
Fatty acid		$C_nH_{2n+1}(COOH)$	-	-	-		-			-	O	O	+		+	+	-	
Fatty alcohol and fats			O	O	+		+			+	+	+	+		+	+	+	Inflammable
Formaldehyde 40%,aqueous solution		CH_2O	-	-	-		-			O	+							
Formic acid		HCOOH																Heed isocorrosion curves!
Concentration	10%, Cold		-	-	-		-	-	-	-	+	+	+		+	+		
	90°C		-	-	-		-		-	-	-	+	+		+	+		
	60%, Cold		-	-	-		-		-	-	O	+	+		+	+		
	60°C		-	-	-		-		-	-	-	O	+		+	+		>70°C Hastelloy C
	90%, Cold		-	-	-		-		-	O	O	+	+		+	+		
	60°C		-	-	-		-		-	-	-	O	+		+	+		
Freon, frigen 12		$F12:CF_2Cl_2$	-	O	O		-			-	+	+	+		+	+	-	
Fruit juices			-	-	-		-			-	+	+	+		+	+	-	
Fuel oil			O	O	+	O	+	O	O	+	+	+	+		+	+	O	Inflammable
Furfurol		$(CH)_3.O.C.CHO$	O	O	O		O			O	+	+	+		+	+	O	Inflammable
Furfuryl alcohol		$(CH)_3.O.C.CH_2OH$	O	O	O		O			O	+	+	+		+	+	O	Inflammable
Glucose		$C_6H_{12}O_6$	+	+	+		+			+	+	+	+		+	+	+	
Glycerin		$CH_2OH-CHOH-CH_2OH$	O	O	+		+			+	+	+	+		+	+	+	
Glycol (ethylene glycol)		(CH_2OH_2)	O	O	O		+			+	+	+	+		+	+	+	
Green base																		Precise analysis is necessary
Heat transfer fluid oils			O	O	+	O	+	O	+	+	+	+	+	+	+	+	O	
Hexane		C_6H_{14}	O	O	+		+			+	+	+	+		+	+	O	Inflammable
Hydrobromic acid		HBr	-	-	-	-	-			-	-	-	-		-	-	-	Hastelloy B
Hydrochloric acid, aqueous solution		HCl																See hydrochlorid acid
Hydrochlorid acid		HCl	-	-	-	-	-			-	-	-	-		-	-	-	Hard rubber<80°C
Hydrocyanic acid		HCN	O	O	O		O			O	O	+	+		+	+	-	
Hydroftuoric acid,aqueous solution		HF	-	-	-		-			-	-	-	-		-	-	-	Hard rubber (≤40 °C)
Hydrogen peroxide		H_2O_2	-	-	-	-	-	-	-	-	+	O	O	+	O	O	-	
Iron (III) chloride		$FeCl_3$	-	-	-		-			-	-	-	-		-	-	-	Hard rubber (≤80 °C)
Iron (III) sulphate		$Fe_2(So_4)_3$	-	-	-		-			-	O	+	+		+	+	O	
Isobutyl alcohol		$(CH_3)_2CH.CH_2.OH$	O	O	+		+			+	+	+	+		+	+	+	Inflammable
Isopropyl alcohol		$(CH_3)_2CHOH$	O	O	+		+			+	+	+	-		+	+	+	Inflammable
Kerosene			O	O	+		+			+	+	+	-		+	+	O	Inflammable
Lactic acid		$CH_3-CHOH.COOH$	-	-	-		-			O	O	+	-		+	+	O	
Lactic acid (nitrating acid)		$HNO_3+H_2SO_4$	-	-	-		-			-	O	O	O	O	O	O	-	Analysis is necessary
latex			+	+	+		+			+	+	+	-		+	+	+	
Laurin lactam			-	-	-		-			O	O	+	-		+	+	O	
Linseed oil			O	O	+	O	+	O	O	+	+	+	-		+	+	O	Inflammable
Magnesium chloride		$MgCl_2$	-	-	-		O			-	-	-	O		O	O	O	Hard rubber (≤80 °C)
Magnesium sulfate		Mg_2So_4	-	-	-		+			-	-	+	-		+	+	O	
Maleic acid		$(HOOC)_2.(CH)_2$	-	-	-		-			-	O	+	-		+	+	-	
Manganous chloride		$MnCl_2$	-	-	-		O			-	-	O	O	-	O	O	O	Hard rubber (≤80 °C)
Mercury		Hg	+	+	+		+			+	-	+	-	+	+	+	-	
Methanol		CH_3OH	O	O	+		+			+	-	+	-		+	+	+	Inflammable
Methyl acetate		CH_3COOCH_3	-	-	-		-			O	+	+	-		+	+	O	Inflammable
Methylene chloride		CH_2Cl_2	+	+	+		+			+	-	+	-		+	+	+	Anhydrous and acid-free
Milk			-	-	-		-			+	-	+	-		+	+	O	
Molasses			O	O	O	O	O	O	O	O	-	+	-		+	+	O	
Monochloracetic acid(anhydrous)		$CH_2ClCOOH$																
	Cold														O	O		Si-cast iron, Hastelloy C
	70 °C														-	-		Hastelloy C
Monoethanol amine (MEA)		$H_2N-CH_2-CH_2OH$	+	+	+		+				-	+	+	+	+	+	-	For reasons of purity 1.4408/9.4460
Naphthalene		$C_{10}H_8$	O	O	+		+			+	-	+	+		+	+	+	
Nick chloride,	cold	$NiCl_2$																
concentration	<20%		-	-	-		-			-	O	O	-		+	+	-	
	>20%		-	-	-		-			-	-	-	O		+	+	-	Hard rubber
Nickel sulfate	Cold	$NiSO_4$	-	-	-		-			-	+	+	+		+	+	-	
(pure solution	80 °C		-	-	-		-			-	-	-	+		+	+	-	
Nickel sulfate, aqueous solution		$NiSO_4$	-	-	-		-			-	O	O	O	O	O	O	-	
Nitrating acid		H_2SO_4/HNO_3	-	-	-		-			-	O	O	O	O	O	O	-	
Nitric acid, technical			-	-	-	-	-	-	-	-	O	O	O	O	O	O	-	It is indispensable to contact ASK!

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Nitric acid, pure	HNO_3																Heed isocorrosion curves!
Concentration <60%, Cold		-	-	-	-	-	-	-	-	+	+	O	+	O	O	-	
boiled		-	-	-	-	-	-	-	-	+	-	O	O	O	O	-	
Nitric acid, pure	HNO_3																Heed isocorrosion curves!
Concentration <90%, Cold		-	-	-	-	-	-	-	-	+	+	O	+	O	O	-	
98%, boiled		-	-	-	-	-	-	-	-	+	-	O	O	O	O	-	
Cold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
boiled		-	-	-	-	-	-	-	-	-	-	-	O	-	-	-	NORISIL 9.4306-Si
Nitrobenzene	$C_6H_5NO_2$	+	+	+		+			+	+	+	+	-	+	+	+	anhydrous
Nitrocellulose		+	+	+		+			+	+	+	+	+	+	+	+	At impact: sparks, danger of explosion
Nitrophenol	$C_6H_4(OH)NO_2$	+	+	+		+			+	+	+	+	-	+	+	+	anhydrous
Oils		+	+	+		+		+	+	+	+	+	-	+	+	+	
Oleum (20% free SO_3)		-	-	-						+	+	+	+	+	+		+ only cold, or<80 °C
Oxalic acid	$(COOH)_2$	-	-	-		-			-	O	O	O	O	O	O	-	Heed isocorrosion curves!
Paraffins		+	+	+		+		+	+	+	+	+	+	+	+	+	
Pentanol	$C_5H_{11}OH$	+	+	+		+			+	+	+	+	+	+	+	+	Inflammable
Petrol(gasoline)		+	+	+		+			+	+	+	+		+	+	+	Inflammable
Petroleum (crude oil)		O	O	+	O	+	O	O	+	+	+	+		+	+	O	
Phenol,aqueous solution	C_6H_5OH	-	-	-		-			-	O	O	+	+	+	+	-	
Phenolslfonic acid	$HOC_6H_4SO_3H$	-	-	-		-			-	+	+	+	+	+	+	-	
Phosphoric acid, pure	H_3PO_4																Heed isocorrosion curves!
Concentration <85%, Cold		-	-	-		-		-	-	+	+	+		+	+		
100°C		-	-	-		-		-	-	+	+	+		+	+		
Phosphoric acid, technical (Wet hydrolysis)																	Depending on H_2SO_4 content and concentration of contaminations (Cl^-,F^-)
Concentration<75% , Cold		-	-	-		-		-	-	-	-	-		+	+		
80°C		-	-	-		-		-	-	-	-	-		O	O		
Phthalic anhydride	$C_6H_4.(CO)_2.O$	O	O	O		O			+	+	+	+	+	+	+	+	
Plant oils (vegetable fat)		+	+	+					+	+	+	+	+	+	+		For reasons of purity 1.4408/9.4460
Potassium aluminium sulfat	$KAl(SO_4)_2$	-	-	-		-			O	O	+	+		+	+	O	
Potassium carbonate(potash)	K_2CO_3	+	+	+		+			+	+	+	+		+	+	+	
Potassium chlorite	KCl	-	-	-		-			-	-	O	+		+	+	O	
Potassium chromate	K_2CrO_4	O	O	O		O			O	+	+	+		+	+	-	
Potassium chromium sulphate	$KCr(SO_4)_2$	-	-	-		-			O	O	+	+		+	+	O	
Potassium cyanide	KCN	O	O	O		O			O	+	+	+		+	+	-	
Potassium hydroxide	KOH																
Concentration 30%, Cold		+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	
80°C		O	O	O	O	-	+	+	+	+	+	+	+	+	-	-	
50%, Cold		+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	
80°C		-	-	-	-	-	-	-	-	+	+	+	+	+	+	-	
Potassium hypochlorite	KOCl	-	-	-		-			-	-	-	O		O	O	-	Hard rubber(Genakor 08 to 80 g/l Cl_2.≤60 °C)
Potassium nitrate	KNO_3	-	-	-		-			+	+	+	+		+	-	-	
Potassium oxalate	$(COOK)_2$	-	-	-		-			O	+	+	+		+	-	-	
Potassium permanganate	$KMnO_4$	O	O	O		O			O	+	+	+		+	+	O	
Potassium silicate	K_2SiO_3	O	O	O		O		-	+	+	+	+		+	+	O	
Potassium sulfate	K_2SO_4	-	-	-		-			+	+	+	+		+	-	O	
Propionic acid, aqueous solution	$C_2H_5.COOH$	-	-	-		-			-	O	+	+	O	+	-	-	
Pyridinp	C_5H_N	+	-	+		+			+	+	+	+	+	+	-	O	
Pyrollidon	$HN.(CH_2)_3.CO$	+	-	+		-			+	+	+	+	+	+	-	-	
Saccharine juice		O	O	O	O	O	O	-	+	+	+	+	+	+	-	O	
Seawater																	See water
Selexol		O	O	O					+	+	+	+	+	+	-	-	
Silicon oil		+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	
Silver nitrate, aqueous solution	$AgNO_3$	-	-	-		-			O	+	+	+	+	+	-	-	
Slop (distillation residue)		O	O	+		O			+	+	+	+	+	+	-	O	Inflammable
Sodium acetate, aqueous solution	$Na.CH_3COO$	-	-	-		-			O	O	+	+		+	-	O	
Sodium aluminate. aqueous solution	$Na_3[Al(OH)_6]$																
concentration <20%,Na_2O cold		+	+	+		-			+	+	+	+		+	-	-	
80°C		+	+	+		-			+	+	+	+		+	-	-	
>31,5%Na_2O cold		+	+	+		-			+	+	+	+		+	-	-	
80°C		+	+	+		-			-	-	-	-					
Sodium carbonate. aqueous solution	Na_2CO_3	+	+	+		-			+	+	+	+		+	+	+	
Sodium chloride, aqueous solution	NaCl	-	-	-		-		-	-	-	O	+		+	+	O	
Sodium hydrogen sulfate	$NaHSO_4$	-	-	-		-			-	+	+	+		+	-	O	
Sodium hydrogen sulfate, cold	$NaHSO_3$	-	-	-		-			-	+	+	+		+	+	+	
Sodium hydroxide. aqueous solution	NaOH																heed isocorrosion curves!
Concentration 30%. Cold		+	+	+	+	-	+	-	+	+	+	+	+	+	-	-	
80 °C		O	O	O	O	-	O	-	+	+	+	+	+	+	+	-	
50%. Cold		+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	
80 °C		-	-	-	-	-	-	-	-	+	+	+	+	+	+	-	
Sodium hypochlorite	NaOCl																
Concentration ≤ 80g/l. Cold		-	-	-		-		O	-	O	O	O	O	+	+	O	Hard rubber
boiled		-	-	-		-		-	-	-	-	-	-	O	O	-	Hastelloy C
Sodium nitrate, cold	$NaNO_3$	+	+	+		+			+	+	+	+		+	+	+	
Sodium perborate	$NaBO_2.H_2O_2$	-	-	-		-			-	+	+	+		+	+	-	
Sodium silicate	$Na_2O.{}_xSiO_2$	O	O	O		O			O	+	+	+		+	+	O	
Sodium sulfate, aqueous solution	Na_2SO_4	-	-	-		O			+	+	+	+		+	+	+	
Sodium sulfide, aqueous solution	Na_2S	-	-	-		-			-	+	+	+		+	+	-	
Sodium sulfite, aqueous solution	Na_2SO_3	-	-	-		-			-	+	+	+		+	+	+	
Sodium thiosulfate	$Na_2S_2O_3$	-	-	-		-			-	+	+	+		+	+	-	
Spin bath acid(with $H_2S$and CS_2)		-	-	-		-			-	-	-	-	-	-	-	-	Hastelloy C, hard rubber(with limitation)
Stretford base		O	O	O					+	+	+	+	+	+	+	-	

جدول مقاومت شیمیایی مواد + : عالی 0 : قابل استفاده در شرایط خاص - : ضعیف خالی : آزمایش نشده

Pumped medium				GG-25	GGG-40;GGG-40.3	GS-C 25	ERN	Ni-Resist D2	NORIHARD® NH 15 3	NORILOY® NL 25 2	1.4008	1.4308	1.4408	1.4500	NORICID® 9.4306	NORIDUR® 9.4460	NORICLOR® NC 24 6	G-CuAl 10 Ni	Special materials / remark
Stretford base				O	O	O					+	+	+	+	+	+	+	-	
Styrene			C_6H_5-CH=CH_2	O	O	+		+			+	+	+	+	+	+	+	+	Inflammable
Sulfur, fused			S	+	+	+		+			+	+	+	+	+	+	+	-	<130°C
Sulfur ,dioxide, aqueous solution			H_2SO_3	-	-	-		-			-	-	+	+	+	+	+	-	
Sulfuric acid, pure			H_2SO_4																heed isocorrosion curves!
Concentration	10%	Cold		-	-	-				-	-	-	+	+	O	+	+	-	
		90 °C		-	-	-				-	-	-	-	+	-	+	+	-	
	40%	Cold		-	-	-				-	-	-	-	+	-	+	+	-	
		40 °C		-	-	-				-	-	-	-	+	-	+	+	-	
	55-80%	Cold		-	-	-				-	-	-	-	O	-	O	+	-	NORIDUR 9.4460resist. in torrential acid(v=10m/s)
	90%	Cold		+	+	-				-	+	+	+	+	+	+	+	-	
		40 °C		-	-	-				-	O	O	+	+	O	+	+	-	
	98%	Cold		+	+	O				-	+	+	+	+	+	+	+	-	
		70 °C		-	-	-				-	-	-	-	-	+	+	+	-	
Sulfuric acid , technical				-	-	-				-	-	O	O	O	O	O	O	-	It is indispensable to contact ASK!
Sulfurous acid			H_2SO_3	-	-	-		-			-	-	+	+	+	+	+	-	
Tannic acid			$C_{76}H_{52}O_{46}$	-	-	-		-			O	O	+	+		+	+	-	
Tar, tar oils				O	O	+	O	+	O	O	+	+	+	+	+	+	+	O	
Tartaric acid, aqueous solution			$(CHOH)_2.(COOH)_2$	-	-	-	-	-	-	-	O	O	+	+	O	+	+	-	
Terephthalic acid			$C_6H_4(COOH)_2$	-	-	-		-			O	O	+	+	O	+	+	-	
Titanium dioxide suspension			TiO_2	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	With specification of analysis
Toluene (methibenzene)			C_6H_5-CH_3	O	O	+		+			+	+	+	+	+	+	+	+	Inflammable
Trichloroacetic acid			CCl_3-COOH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Hastelloy C
Trichloroethene			CHCl=CCl_2	+	+	+		+			+	+	+	+	+	+	+	+	Anhydrous and acid-free
Trisodium phosphate			Na_3PO_4	O	O	O	O	+	O	+	+	+	+	+	+	+	+	O	
Urea (carbamide)			$CO(NH_2)_2$	O	O	O		+			O	+	+	+		+	+	-	
Water:			H_2O																
Boiler feed water				O	O	+		+			+	+	+	+	+	+	+	O	Conditioned (see guidelines)
Brackish water				-	-	-	-	+	-	+	-	-	+	+	-	+	+	O	
Brackish water with sand				-	-	-	-	-	-	+	-	-	-	-	-	O	O	-	Depends very much on sand content
Chemistry waster water				O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	Analysis of pumped medium
Complete softening of water				-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	
Condensate				O	O	+		+			+	+	+	+	+	+	+	O	Conditioned
Condensate (not boiler)				-	-	-		-			+	+	+	+	+	+	+	+	
Cooling water				O	O	O	O	O		+	O	O	+	+	O	+	+	O	
Demineraliz. Water =deionat				-	-	-		-			+	+	+	+	+	+	+	+	
Distilled water				-	-	-		-			+	+	+	+	+	+	+	+	
Drinking water				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Corrosion-chemically neutral
Fire water				O	O	O	O	O		+	O	O	+	+	O	+	+	+	
Heating water				O	O	+		+			+	+	+	+	+	+	+	O	Conditioned
Partial softening of water				-	-	-		+			O	O	+	+	O	+	+	+	
Pure water				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Corrosion-chemically neutral
Seawater				-	-	-	-	O	-	+	-	-	O	O	-	+	+	O	
Seawater with sand				-	-	-	-	-	-	+	-	-	-	-	-	O	O	-	
Sewage municipal				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
industrial				O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	Analysis of pumped medium
Sintering water				-	-	-	O	-	+	+									Analysis of pumped med. is necessary, cor-chem. neutral
Untreated water				O	O	O	O	+	O	+	O	O	+	+	O	+	+	O	Analysis of pumped medium Is necessary
Wine				-	-	-	-	-	-	-	O	+	+	+	+	+	+	-	
Zinc chloride			$ZnCl_2$																
Concentration	20%,	Cold		-	-	-		-		O	O	O	+	+	O	+	+	-	Hard rubber
		80°C		-	-	-		-		O	-	-	O	O	-	+	+	-	Hard rubber , Si-cast iron
	60%,	Cold		-	-	-		-		O	-	O	O	O	O	+	+	-	Hard rubber
		80°C		-	-	-		-		-	-	-	O	O	-	+	+		Hard rubber
Zinc sulfate			$ZnSO_4$	-	-	-	-	O	-	O	O	O	O	+	O	+	+	O	H_2SO_4-free