

Chemical Compatibility Chart

Corrosive Agent	Steel	304 SS	316 SS	C-20	Teflon	PVC	Viton	Buna-N	Fluoraz
Acetaldehyde	B	A	A	A	A	C	C	B	C
Acetate Solvents	B	A	A	A	A	C	C	C	C
Acetic Acid, 20%	B	A	A	A	A	A	C	A	C
Acetic Acid Concentrated to 150°F(66° C)		B	A	A	A	C	C		C
Acetic Acid Concentrated to 212°F(100 C)	C	B	A	A	A	C	C	C	
Acetic Anhydride	C	B	A	A	A	C	C	A	C
Acetone	B	A	A	A	A	C	C	B	C
Alum	C	C	B	A	A	A	A	A	A
Aluminum Chloride	C	C	C	B	A	A	A	A	A
Aluminum Nitrate	B	A	A	A	A	A	A		
Aluminum Sulfate	C	C	B	A	A	A	A	A	A
Ammonia Anhydrous	A	A	A	A	A		C	A	A
Ammonium Bicarbonate	A	A	A	A	A	A	A		C
Ammonium Bisulfite	B	A	A	A	A	A	A		
Ammonium Bifluoride	C	B	B	A	A		A		A
Ammonium Hydroxide	C	A	A	A	A	A	B	A	A
Ammonium Nitrate	B	A	A	A	A	A		B	C
Ammonium Phosphate	C	B	A	A	A	A	A	A	
Ammonium Sulfate	C	B	B	B	A	A	A	A	C
Ammonium Sulfite	C	A	A	A	A	A	A		
Amyl Acetate Dry	A	A	A	A	A	C	C	C	C
Amyl Alcohol	A	A	A	A	A	B	A	A	B
Amyl Chloride	C	B	A	A	A	C	C	C	
Aniline Chloride	C	B	A	A	A		B		
Aniline Dyes	C	A	A	A	A	C	B	C	
Animal Fats and Oils		A	A	A	A	A	A	C	A
Aqua Regia	C	C	C	C	A		B	C	
Ascorbic Acid	C	A	A	A	A				
Barium Chloride	C	C	C	B	A	A	A	A	A
Barium Sulfite	B	A	A	A	A	A	A	A	
Benzaldehyde	B	A	A	A	A	C	C	C	
Benzene	A	A	A	A	A	C	B	C	C
Benzene Sulfonic Acid 10%	C	B	B	A	A	A	A	C	C
Benzoic Acid	C	B	B	A	A	A		C	A
Benzoyl Chloride	C	C	C	C	A		B		
Boric Acid	C	A	A	A	A	A	A	A	A
Bromine Anhydrous	C	C	C	B	A	C	A	C	C
Bromine Dilute	C	C	C	C	A	B	A	C	C
Bromine Trifluoride	C	C	B	B	A		C		C
Butadiene	C	A	A	A	A		A		C
Butane	B	A	A	A	A	A	A	A	A
Butyric Acid 20%	C	A	A	A	A		C	A	A
Butyric Acid, Concentrated	C	B	B	B	A		C		A
Calcium Bisulfite	B	A	A	A	A	A	A	A	A
Calcium Carbonate	A	A	A	A	A	A	A	A	A
Calcium Chlorate	C	A	A	A	A	A	A	A	A
Calcium Chloride	C	B	B	A	A	A	A	A	A
Calcium Hydroxide	A	A	A	A	A	A	A	A	A
Calcium Hypochlorite	C	C	C	C	A	A	A	C	A
Calcium Nitrate	C	A	A	A	A	A	A		
Calcium Sulfite	C	A	A	A	A	A	A		
Calcium Sulfate		A	A	A	A	A	A	C	
Camphor Alcohol Sol	B	A	A	A	A				
Carbon Disulfide	C	A	A	A	A		A	C	
Carbon Tetrachloride Dry	B	A	A	A	A	C		C	
Carbon Tetrachloride Wet	C	B	B	B	A	C		C	C
Carbon Water Slurrries	C	B	A	A	A	A	A	A	
Cesium, 260°F(127°C)	C	A	A	A	A	C	C		
Chlorine, Anhydrous	A	A	A	A	A		C	C	C
Chlorine Water	C	C	C	A	A	A	A	C	C
Chloroacetic Acid	C	C	C	C	A		C		C
Chlorobenzene	C	A	A	A	A	C	A		B
Chloroform	B	A	A	A	A	C	A		C
Chlorosulfonic Acid	C	B	B	B	A	C	C	C	B
Choline Chloride	A	A	A	A					
Chromic Acid to 150°F(66°C)	C	B	B	B	A			C	A
Citric Acid	C	B	B	A	A	A	A	A	A
Copper Chloride	C	C	C	C	A	A	A	A	A
Copper Fluoride	C	B	B	B	A	A			

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Copper Nitrate	C	B	A	A	A	A	A	A	A
Copper Sulfate	B	A	A	A	A	A	A	A	A
Cottonseed Oil	A	A	A	A	A	A	A		A
Creosols	A	A	A	A	A	C	C	C	A
Cyclohexane	B	A	A	A	A	C	A	C	A
Cyclohexanone	B	A	A	A	A	C	C	C	B
Dichlorethane, Dry	A	A	A	A	A	C		C	C
Diethanolamine	A	A	A	A	A	C	C		A
Diethyl Benzene	A	A	A	A	A	C			
Diethyl Ether	A	A	A	A	A		C		C
Diethyl Sulfate	C	B	B	A	A				
Diethylene Glycol	B	A	A	A	A		A	A	A
Dimethyl Amine	A	A	A	A	A	C			
Dimethyl Phthalate	A	A	A	A	A	C	C		B
Ether	A	A	A	A	A	C	C		C
Ethyl Acetate	A	A	A	A	A	C	C	C	C
Ethyl Alcohol	A	A	A	A	A	A	C		A
Ethyl Benzene	A	A	A	A	A		A		C
Ethyl Bromide	C	C	C	C	A	C			
Ethyl Chloride	C	A	A	A	A	C	A	C	A
Ethyl Mercaptan	B	A	A	A	A	C	A		C
Ethylene(Liquefied)	A	A	A	A	A				
Ethylene Dichloride	C	A	A	A	A		B	C	A
Ethylene Glycol	B	A	A	A	A	A	A	A	A
Ethylene Oxide	C	A	A	A	A	C	C	C	C
Fatty Acids	C	A	A	A	A	A	A	A	
Ferric Chloride	C	C	C	C	A	A	A	A	A
Ferric Nitrate	C	B	B	A	A	A	A	A	
Ferric Sulfate	C	C	B	C	A	A	A	A	A
Ferrous Chloride	C	C	C	C	A	A	A	A	
Ferrous Sulfate	C	C	C	C	A	A	A	A	
Filter Aid Slurries B	A	A	A	A	A	A	A		
Fluosilicic Acid	C	C	C	B	A	A	A	A	
Copper Fluoride	C	B	B	B	A	A			
Copper Nitrate	C	B	A	A	A	A	A	A	A
Copper Sulfate	B	A	A	A	A	A	A	A	A
Cottonseed Oil	A	A	A	A	A	A	A		A
Creosols	A	A	A	A	A	C	C	C	A
Cyclohexane	B	A	A	A	A	C	A	C	A
Cyclohexanone	B	A	A	A	A	C	C	C	B
Dichlorethane, Dry	A	A	A	A	A	C		C	C
Diethanolamine	A	A	A	A	A	C	C		A
Diethyl Benzene	A	A	A	A	A	C			
Diethyl Ether	A	A	A	A	A		C		C
Diethyl Sulfate	C	B	B	A	A				
Diethylene Glycol	B	A	A	A	A		A	A	A
Dimethyl Amine	A	A	A	A	A	C			
Dimethyl Phthalate	A	A	A	A	A	C	C		B
Ether	A	A	A	A	A	C	C		C
Ethyl Acetate	A	A	A	A	A	C	C	C	C
Ethyl Alcohol	A	A	A	A	A	A	C		A
Ethyl Benzene	A	A	A	A	A		A		C
Ethyl Bromide	C	C	C	C	A	C			
Ethyl Chloride	C	A	A	A	A	C	A	C	A
Ethyl Mercaptan	B	A	A	A	A	C	A		C
Ethylene(Liquefied)	A	A	A	A	A				
Ethylene Dichloride	C	A	A	A	A		B	C	A
Ethylene Glycol	B	A	A	A	A	A	A	A	A
Ethylene Oxide	C	A	A	A	A	C	C	C	C
Fatty Acids	C	A	A	A	A	A	A	A	
Ferric Chloride	C	C	C	C	A	A	A	A	A
Ferric Nitrate	C	B	B	A	A	A	A	A	
Ferric Sulfate	C	C	B	C	A	A	A	A	A
Ferrous Chloride	C	C	C	C	A	A	A	A	
Ferrous Sulfate	C	C	C	C	A	A	A	A	
Filter Aid Slurries B	A	A	A	A	A	A	A		
Fluosilicic Acid	C	C	C	B	A	A	A	A	
Formaldehyde,80°F(27°C),Rm. Temp	B	B	A	A	A	B	A	A	C
Formic Acid,80°F(27°C)	C	B	A	A	A	B	B	C	A

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Freons, 80°F(27°C)	B	A	A	A	A			C	C
Fuel Oil	A	A	A	A	A	A	A	C	A
Furfural	B	A	A	A	A	C	C	C	A
Furfural Alcohol	B	B	B	A	A	C	C	C	
Gallic Acid,5%	C	B	B	B	A	A	A	B	
Gasoline	A	A	A	A	A		A	C	B
Glucose	A	A	A	A	A	A	A	A	A
Glycerine	B	A	A	A	A	A	A	A	A
Heptane	B	A	A	A	A	C	A	B	C
n-Hexane	B	A	A	A	A	C	A	B	
Hydrazine,35% and above	C	A	B	B	A	C	C	B	A
Hydrobromic Acid	C	C	C	C	A	B	A	C	A
Hydrochloric Acid,37%	C	C	C	C	A	A	A	C	A
Hydrocyanic Acid	C	A	A	A	A	A	A	C	A
Hydrofluoric Acid to 48%	C	C	C	C	A	A	A	C	A
Hydrogen Chloride Dry	A	A	A	A	A				
Hydrogen Cyanide	B	A	A	A	A	A			
Hydrogen Fluoride-Anhydrous	C	C	C	C	A			C	A
Hydrogen Peroxide, 50%	C	A	A		A		C	C	C
Hydrogen Peroxide, 90%	C	A	A		A	C	C	C	C
Hydrogen Sulfide	C	B	B	B	A	A		A	A
Hydroquinone	A	A	A	A	A	A	C		
Hypo(Sodium Thiosulfate)	C	B	A	A	A	A	A		
Iodine Solution, 5%	C	C	C	C	A	C	A	C	A
Isopropyl Alcohol	A	A	A	A	A		A	A	A
Isopropyl Chloride Dry	B	A	A	A	A				C
Kerosene	A	A	A	A	A	A	A	C	B
Lactic Acid, 50% 80°F(27°C)	B	B	A	A	A	A	A	A	B
Lard Oil	A	A	A	A	A		A	C	A
Lead Acetate	B	A	A	A	A	A	C	A	C
Lead-Tetraethyl	B	A	A	A	A				
Magnesium Carbonate	A	A	A	A	A	A	A	A	
Magnesium Chloride	C	B	B	A	A	A	C	A	
Magnesium Nitrate	A	A	A	A	A	A	A	A	
Magnesium Sulfate	B	A	A	A	A	A	A	A	
Maleic Acid-Dilute	C	B	A	A	A	A	A	C	
Melamine Resins	C	B	B	B	A			C	
Mercaptans	A	A	A	A	A		A	C	
Mercuric Chloride, Sol	C	C	C	B	A	A	A		
Mercury	B	A	A	B	A	A	A	A	
Methyl Alcohol	A	A	A	A	A	A	C	A	
Methyl Celiosolve	A	A	A	A	A		C	B	
Methyl Formate	A	A	A	A	A		C		
Methylene Chloride	B	A	A	A		C	C	C	C
Methyl Ethyl Ketone	A	A	A	A	A	C	C	C	C
Monochloroacetic Acid 70 F (21 C)	C	B	B	B	A	A			
Morpholine	A	A	A	A	A		C		
Muriatic Acid	C	C	C	C	A	A	A	C	A
Mustard	C	B	A	A	A	A		A	A
Naphtha	B	A	A	A	A	A	A	C	A
Naphthalene, Molten	A	A	A	A	C	C	A	C	C
Nickel Carbonyl, Solution		B	A	A	A				
Nickel Chloride, Solution		B	B	B	A	A	A	A	A
Nickel Nitrate, Solution		A	A	A	A	A	A	A	
Nickel Sulfate Solution		B	A	B	A	A	A	A	A
Nitric Acid to conc.-Rm		A	A	B	A	C	A	C	B
Nitric Acid,Red Fuming,Rm		A	A	B	A	C	C	C	B
Nitro Benzene to 212°F(100°C)		B	A	A		C	B	C	A
Nitrous Acid, 5%		A	A	A	A				
Nitrogen Tetroxide		A	A	A	A		C		
Nitrochlorobenzene				A	A	C	A		
Oleic Acid		A	A	A		A	B	B	
Oleum-25%		B	A	A	A	C	B	C	
Olive Oil	A	A	A	A	A	A	A	C	
Oxalic Acid		B	B	A	A	A	A	B	
Paraffin-Molten	A	A	A	A	A				
Paraldehyde	A	A		A	A				

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Corrosive Agent	Steel	304 SS	316 SS	C-20	Teflon	PVC	Viton	Buna-N	Fluoraz
Pentane	A	A		A	A				A
Perfumes	A	A		A	A				
Phenol-Molten	B	B		B	A		C		A
Phosgene		A		A	A				
Phosphoric Acid,60 Free of HF	C	B		A	A			C	A
Phosphoric Acid, 75% Free of HF	C	B	B	A	A	A	A	C	A
Phosphorous-Molten		B	A	A	A			C	
Phosphorous Oxychloride	C				A				
Phosphorous Trichloride	C	A	A	A	A		A	C	A
Pine Oil	A	A	A	A	A		B		
Phthalic Anhydride		B	B	A	A				B
Potassium Chromate	A	A	A	A	A	A	A	A	
Potassium Bromide	C	B	B	A	A	A	A	A	A
Potassium Carbonate	B	A	A	A	A	A	A	A	A
Potassium Chlorate	B	A	A	A	A	A	A	A	A
Potassium Chloride	C	B	B	A	A	A	A	A	A
Potassium Dichromate	B	A	A	A	A	A	A		A
Potassium Ferrocyanide	B	A	B	A	A	A	A		
Potassium Hydroxide	B	B	A	A	A	A	B	B	A
Potassium Iodide	C	B	B		A	A	A		
Potassium Nitrate	A	A	A	A	A	A	A	A	A
Potassium Permanganate	C	A	A	A	A	A	A	A	A
Potassium Sulfate	B	A	A	A	A	A	A	A	A
Propane	A	A	A	A	A	A	A	B	A
Propylene Dichloride, Dry	B	A	A	A	A	C		C	
Propylene Glycol	A	A	A	A	A		A	C	A
Propylene Oxide	A	A	A	A	A		C	C	C
Pyrogalllic Acid	B	A	A	A	A				
Quinoline		A	A	A	A				
Silver Nitrate		A	A	A	A	A	A	A	A
Sodium-Molten		A	A	A	C			C	
Sodium-Potassium, NaK Alloy		A	A		C				
Sodium Acetate		B	A	A	A	A	C	B	C
Sodium Aluminate	B	A	A	A	A	A	B	A	A
Sodium Bicarbonate	B	A	A	A	A	A	A	A	A
Sodium Bichromate	B	A	A	A	A	A	A		
Sodium Bifluoride Slurry		A	A	A			C		
Sodium Bisulfate		B	A	A	A	A	A	A	A
Sodium Bisulfite	B	A	A	A	A	A	A	A	A
Sodium Borate	B	A	A	A	A	A	A	A	A
Sodium Bromide	C	B	B	A	A	A	A	A	
Sodium Carbonate	B	A	A	A	A	A	A	A	A
Sodium Chlorate	C	B	B	A	A	A	A	A	
Sodium Chloride	C	B	B	A	A	A	A	A	A
Sodium Chlorite	C	C	C	C	A	A	A	C	
Sodium Citrate	B	A	A	A	A	A			
Sodium Cyanide	B	A	A	A	A	A	A	A	C
Sodium Dichromate	A	A	A	A	A	B	A	B	
Sodium Ferricyanide, 5%	B	A	A	A	A	A	A	B	
Sodium Fluoride	C	C	B	B	A	A	A	C	
Sodium Hydroxide, 50%	A	A	A	A	A	A	B	B	A
Sodium Hydroxide, 73%	B	B	B	B	A		C	B	A
Sodium Hypochlorite, 5%	C	C	C	C	A	A	A	C	B
Sodium Hypochlorite, 20%	C	C	C	C	A	A	B	C	A
Sodium Metaphosphate	B	A	A	A	A	A	A	B	A
Sodium Nitrate	B	A	A	A	A	A	A	A	C
Sodium Nitrite		B	A	A	A	A	A	A	
Sodium Peroxide	C	A	A	A	A		A	A	A
Sodium Silicate	B	A	A	A	A	A	A	A	A
Sodium Sulfate	A	A	A	A	A	A	A	A	A
Sodium Sulfite		A	A	A	A	A	A	A	A
Sodium Thiosulfate (Hypo)	C	B	B	A	A	A	A	A	
Stannic Chloride	C	C	C	B	A	A	A	C	
Stannous Chloride		B	A	A	A	A	A	A	
Stearic Acid		A	A	A	A	A	A	B	A
Styrene		A	A	A	A		C	C	
Sulfamic Acid				B	A			B	

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Sulfur-Molten		A	A	A	A		C		B
Sulfur Chloride		C	C	A	A		C	C	C
Sulfur Dioxide Dry	A	A	A	A	A			C	A
Sulfan	C	B	A	A	A		C		
Sulfur Trioxide	C	B	A	A	A		C		A
Sulfuric Acid below 93%	C	C	C	A	A	B	A	C	A
Sulfuric Acid-Commercial Concentrated	C	C	A	A	A	C	A	C	A
Sulfuric Acid, Fuming, 20%		B	A	A	A	C	B	C	A
Sulfurous Acid		B	B	A	A	A	A		
Tannic Acid, 10%		A	A	A	A	A	A	A	A
Tartaric Acid		B	A	A	A	A	A	A	A
Thionyl Chloride	C	C	B		A	C			
Titanium Dioxide Slurry	B			A	A	A	A	A	
TitaniumTetrachloride, Dry	A	A	A	A	A		A	B	C
Toluene	A	A	A	A	A	C	B	C	C
Tributyl Phosphate	B	A	A	A	A	C	C	C	
Trichloroethylene, Dry	A	A	A	A	A	C	A	C	
Tricresyl Phosphate	B	A	A	A	A	C	B	C	A
Triethanolamine		A	A	A	A	B	C	A	A
Trisodium Phosphate, Sol	B	A	A	A	A	A	A	A	A
Tung Oil	A	A	A	A	A		A		
Turpentine	A	A	A	A	A	A	A	C	A
Urea Formaldehyde	A	A	A	A	A				
Vegetable Oils	A	A	A	A	A	A	A	C	A
Uranium Nitrate		A	A	A	A				
Vinyl Acetate		A	A	A	A		C	C	
Vinylidene Chloride		A	A	A	A				A
Vinylidene Fluoride	B	A	A	A	A				
Xylene		A	A	A	A	C	C	C	C
Zinc Oxide Slurry	B	A	A	A	A	A	A	A	
Zinc Sulfate	B	A	A	A	A	A	A	A	A
Zinc Chromate		A	A	A	A	A	A		

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