

Impervite Corrosion Resistance Chart - Page 1

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Acetamide	100	340	Phenolic
Acetanilid	100	340	Phenolic
Acetic Acid	100	340	Phenolic
Acetic Anhydride	100	340	Phenolic
Acetylene	100	340	Phenolic
Acidified starch solutions	100	340	Phenolic
Alkl Aryl Sulfonate	100	340	Phenolic
Allyl Alcohol	100	340	Phenolic
Alum	100	340	Phenolic
Alum, Ammonium	100	340	Phenolic
Alum, Chrome	100	340	Phenolic
Alum, Potassium	100	340	Phenolic
Aluminum Chloride	100	340	Phenolic
Aluminum Fluoride	100	340	Phenolic
Aluminum Hydroxide			Not Recommended
Aluminum Nitrate	100	340	Phenolic
Aluminum Sulfate	100	340	Phenolic
Amino acid + HCL and H2SO4	100	185	Phenolic
Ammonia (gas)	100	340	Phenolic
Ammonia (gas-dry)	100	room	Phenolic
Ammonia, aqueous	10	340	Phenolic
Ammonium Bifluoride	100	340	Phenolic
Ammonium Carbonate	100	340	Phenolic
Ammonium Chloride	100	340	Phenolic
Ammonium Fluoride	100	340	Phenolic
Ammonium Hydroxide	100	140	Phenolic
Ammonium Metaphosphate	100	340	Phenolic
Ammonium Nitrate	100	275	Phenolic
Ammonium Persulfate Plus H2SO4	25	room	Phenolic
Ammonium Sulfate	100	340	Phenolic
Ammonium Sulfite	100	340	Phenolic
Ammonium Thiocyanate	100	340	Phenolic
Amyl Acetate	100	340	Phenolic
Amyl Alcohol	100	340	Phenolic
Aniline	100	340	Phenolic
Aniline Hydrochloride	60	340	Phenolic
Arsenic Trichloride	100	230	Phenolic- no cement
Aureomycin	100	340	Phenolic
Beer	100	340	Phenolic
Benzaldehyde	100	340	Phenolic

Impervite Corrosion Resistance Chart - Page 2

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Benzene	100	340	Phenolic
Benzene Hexachloride	100	212	Phenolic
Benzoic acid	100	340	Phenolic
Benzylsulfonic acid	0-60	340	Phenolic
Beta-Naphthol	100	340	Phenolic
Black Liquor	100	340	Phenolic
Borax	100	340	Phenolic
Boric acid	100	340	Phenolic
Brine	100	340	Phenolic
			Not
Bromine	100	-	Recommended
			Not
Bromine water	100	-	Recommended
Butadiene	100	340	Phenolic
Butane	100	340	Phenolic
Butyl Acetate	100	340	Phenolic
Butyl Acrylate + Acrylic acid	100	340	Phenolic
Butyl Alcohol	100	340	Phenolic
Butyl Cellosolve	100	340	Phenolic
Butylene	100	340	Phenolic
Butyraldehyde	100	340	Phenolic
Butyric acid	100	340	Phenolic
Calcium Bisulfide	100	340	Phenolic
Calcium Bi sulfite	100	340	Phenolic
Calcium Carbonate	100	340	Phenolic
Calcium Chlorate	0-10	140	Phenolic
Calcium Chloride	100	340	Phenolic
Calcium Chloride + Calcium Chlorate	30/10	140	Phenolic
			Not
Calcium Hydroxide			Recommended
			Not
Calcium Hydroxide			Recommended
Calcium Hypochlorite	100	90	Phenolic
Calcium Nitrate	100	340	Phenolic
Calcium Oxide	100	340	Phenolic
Calcium Phosphate	100	340	Phenolic
Calcium Sulfate	100	340	Phenolic
Caprylic acid	100	340	Phenolic
Carbon Dioxide (dry)	100	340	Phenolic
Carbon Dioxide (wet)	100	340	Phenolic

Impervite Corrosion Resistance Chart - Page 3

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Carboxymethyl Cellulose	100	340	Phenolic
Castor oil	100	340	Phenolic
Caustic Potash			Not Recommended
Caustic Soda			Not Recommended
Cellosolve solvent	100	340	Phenolic
Cellulose Acetate	100	340	Phenolic
Chloral			Not Recommended
Chloral Hydrate	100	340	Phenolic
Chlorethylbenzene	100	257	Phenolic
Chlorinated Ehtyl Alcohols	100	340	Phenolic
Chlorine - Dry	100	room	Phenolic
Chlorine- Wet			Not Recommended
Chlorine Dioxide			Not Recommended
Chloroacetic Acid	100	212	Phenolic
Chlorobezene	100	340	Phenolic
Chloroethylbenzene	100	257	Phenolic
Chloroform	100	340	Phenolic
Chlorosulfonic Acid	100	limited	Phenolic
Chromic Acid			Not Recommended
Citric Acid	100	340	Phenolic
Copper Carbonate	100	340	Phenolic
Copper Chloride	100	340	Phenolic
Copper cyanide	100	340	Phenolic
Copper Fluoride	100	340	Phenolic
Copper Nitrate	100	340	Phenolic
Copper Sulfate	10	340	Phenolic
Cresylic Acid + H2SO4	100	340	Phenolic
Cupric Chloride	100	340	Phenolic
Cyclohexane	100	340	Phenolic
Deoxidine	100	140	Phenolic
Dialkyl Phthalates	100	340	Phenolic
Dichloro derivatives	100	340	Phenolic
Diethyl Ether	100	340	Phenolic
Diethylamine	100	340	Phenolic
Diphenylamine	100	340	Phenolic
Electropolishing Solutions			Not Recommended
Epson Salts	100	340	Phenolic
Ethanolamine	100	340	Phenolic
Ethers	100	340	Phenolic
Ethyl Acetate	100	340	Phenolic

Impervite Corrosion Resistance Chart - Page 4

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Ethyl Alcohol	100	340	Phenolic
Ethyl Chloride	100	340	Phenolic
Ethyl Mercaptan-water	Saturated	340	Phenolic
Ethylene	100	340	Phenolic
Ethylene Chlorohydrin	0-8	122	Phenolic
Ethylene Dibromide	100	340	Phenolic
Ethylene Dichloride	100	340	Phenolic
Ethylene Glycol	100	340	Phenolic
Ethylene Oxide	100	340	Phenolic
Ethylenediamine	100	340	Phenolic
Fatty acids	100	340	Phenolic
Ferric Chloride	100	340	Phenolic
Ferric Nitrate	100	340	Phenolic
Ferric Sulfate	100	340	Phenolic
Ferrous Chloride	100	340	Phenolic
Ferrous Nitrate	100	340	Phenolic
Ferrous Sulfate	100	340	Phenolic
Flourine	100	-	Not Recommended
Folic acid	100	340	Phenolic
Formaldehyde	100	340	Phenolic
Formic acid	100	340	Phenolic
Freons	100	340	Phenolic
Fructose	100	340	Phenolic
Fruit Juices, pulp	100	340	Phenolic
Furfural	100	340	Phenolic
Gas - natural	100	340	Phenolic
Gasoline	100	340	Phenolic
Gin	100	340	Phenolic
Glucose	100	340	Phenolic
Glycerine	100	340	Phenolic
Heptane	100	340	Phenolic
Hydrazine	100	limited	Phenolic
Hydrobromic acid	100	340	Phenolic
Hydrochloric Acid	100	340	Phenolic
Hydroflouric Acid	0-48%	340	Phenolic
Hydroflouric Acid	48-60	185	Phenolic
Hydroflouric Acid	over 60%		Not Recommended
Hydrofluosilicic Acid	20%	340	Phenolic
Hydrogen Chloride	100	340	Phenolic
Hydrogen Peroxide	100	340	Phenolic

Impervite Corrosion Resistance Chart - Page 5

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Hydrogen Sulfide - aqueous	100	340	Phenolic
Hydrogen Sulfide - Dry	100	340	Phenolic
Hydroquinone	100	340	Phenolic
Hypo Sodium Thiosulfate	100	340	Phenolic
Iodine			Not Recommended
Isopropyl Acetate	100	340	Phenolic
Isopropyl Ether	100	340	Phenolic
Keytones	100	340	Phenolic
Lead Acetate	100	340	Phenolic
Magnesium Hydroxide	100	340	Phenolic
Magnesium Sulfate	100	340	Phenolic
Maleic Acid	100	340	Phenolic
Manganese Sulfate	100	340	Phenolic
Manganous Sulfate	100	340	Phenolic
Mercurous Nitrate	100	340	Phenolic
Mercury	100	60	Phenolic
Methyl Alcohol	100	340	Phenolic
Methyl Bromide	100	340	Phenolic
Methyl Chloride	100	340	Phenolic
Methyl Chloroform	100	340	Phenolic
Methyl Ethyl Keytone	100	340	Phenolic
Methyl Silicytate	100	340	Phenolic
Methylene Chloride	100	340	Phenolic
Mineral Oil	100	340	Phenolic
Naphtha	100	340	Phenolic
Nickel Chloride	100	340	Phenolic
Nickel Sulfate	100	340	Phenolic
Nitric Acid	0-10	185	Phenolic
Nitric Acid	10-20	140	Phenolic- no cement
Nitric Acid	over 20		Not Recommended
Nitric acid + hydrofluoric acid			Not Recommended
Nitrobenzene	100	340	Phenolic
Nitroparaffin	85	340	Phenolic
Nitrous acid	100	limited	Consult Factory
Nitrous Oxide	all	limited	Consult Factory
Octyl Alcohol	100	340	Phenolic
Oleic Acid	100	340	Phenolic
Oxalic Acid	100	340	Phenolic
Oxygen	100	340	Phenolic
Palmitic Acid	100	340	Phenolic

Impervite Corrosion Resistance Chart - Page 6

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Palmitic acid	100	340	Phenolic
Paraldehyde	100	340	Phenolic
Parkerizing solution	100	340	Phenolic
Pentaerythritol	100	340	Phenolic
Perchloric acid	100	340	Phenolic
Perchloroethylene	100	340	Phenolic
Petrolatum	100	340	Phenolic
Petroleum - oil based	100	340	Phenolic
Phenol	100	340	Phenolic
Phenylhydrazine Hydrochloride	100	340	Phenolic
Phosphoric acid	85	340	Phenolic
Phosphorous Trichloride	100	340	Phenolic
Phosphorous - red	100	340	Phenolic
Phosphorous - yellow	100	340	Phenolic
Phosphorous Oxychloride	100	340	Phenolic
Phosphorous Pentoxide	100	340	Phenolic
Photographic solutions	100	340	Phenolic
Phthalic Anhydride	100	340	Phenolic
Plating Solutions - Brass	100	340	Phenolic
Plating Solutions - Cadmium	100	340	Phenolic
Plating Solutions - Chromium			Not Recommended
Plating Solutions - Copper	100	340	Phenolic
Plating Solutions - Gold	100	340	Phenolic
Plating Solutions - Lead	100	340	Phenolic
Plating Solutions - Nickel	100	340	Phenolic
Plating Solutions - Tin	100	340	Phenolic
Plating Solutions - Zinc	100	340	Phenolic
Polyethylene	100	340	Phenolic
Potassium Aluminum Sulfate	100	340	Phenolic
Potassium Bicarbonate	30	340	Phenolic
Potassium Bromide	30	340	Phenolic
Potassium Carbonate	50	340	Phenolic
Potassium Chlorate	limited	limited	Consult Factory
Potassium Chloride	100	340	Phenolic
Potassium Chromate	30	340	Phenolic
Potassium Cyanide	30	340	Phenolic
Potassium Dichromate	30	340	Phenolic
Potassium ferricyanate	30	340	Phenolic
Potassium Ferrocyanide	30	340	Phenolic
Potassium Hydroxide	100	340	Phenolic

Impervite Corrosion Resistance Chart - Page 7

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Potassium Hypochlorite	100	Limited	Consult Factory
Potassium Perchlorate	100	Limited	Consult Factory
Potassium Permanganate	20	340	Phenolic
Potassium Persulfate	10	340	Phenolic
Propane	100	340	Phenolic
Pyridine	100	340	Phenolic
Salicytaldehyde	100	340	Phenolic
Salicytic Acid	100	340	Phenolic
Sea Water	100	340	Phenolic
Silver Cyanide	100	340	Phenolic
Silver Nitrate	100	340	Phenolic
Sodium	100	340	Phenolic
Sodium Acetate	100	340	Phenolic
Sodium Benzoate	100	340	Phenolic
Sodium Bicarbonate	20	340	Phenolic
Sodium Bromide	100	340	Phenolic
Sodium Carbonate	100	340	Phenolic
Sodium Chlorate			Limited
Sodium Chloride	100	340	Phenolic
Sodium Chlorite	4	room	Phenolic
Sodium Chromate	80	340	Phenolic
Sodium Dichromate	100	340	Phenolic
Sodium Ferricyanide	100	340	Phenolic
Sodium Fluoride	100	340	Phenolic
Sodium Hydroxide	67	340	Phenolic
Sodium Hydroxide	67-80	275	Phenolic
Sodium Hypochlorite			Consult Factory
Sodium Phosphate	100	340	Phenolic
Sodium Sulfate	100	340	Phenolic
Sodium Sulfite	10	340	Phenolic
Sodium Thiosulfate	100	340	Phenolic
Stannic Chloride	100	122	Phenolic
Steam	100	340	Phenolic
Stearic Acid			Not Recommended
Styrene	100	340	Phenolic
Sulfonated Detergents	100	340	Phenolic
Sulfur	100	340	Phenolic
Sulfur Dioxide	100	340	Phenolic
Sulfur Monochloride	100	122	Phenolic
Sulfur Trioxide			Not Recommended

Impervite Corrosion Resistance Chart - Page 8

Chemical Reagent	Concentration (weight %)	Max. Operating Temp (°F)	Impervite Grade
Sulfuric acid	0-70	340	Phenolic
Sulfuric acid	70-85	340	Phenolic - no cement
Sulfuric acid	85-90	340	Phenolic - no cement
Sulfuric acid	90-93	160	Phenolic - no cement
Sulfuric acid	over 93	-	Not Recommended
Sulfuric acid w/ Nitric acid	96/1	-	Not Recommended
Sulfurous acid	All	Limited	Consult Factory
Tannic acid	100	340	Phenolic
Tannic Chloride	100	340	Phenolic
Tanning Liquors	100	340	Phenolic
Tartaric acid	100	340	Phenolic
Tetrachloroethane	100	340	Phenolic
Tetraethyl Lead	100	340	Phenolic
Tetramin C	100	340	Phenolic
Therminol (all types)	100	340	Phenolic
Titanium Dioxide	100	340	Phenolic
Toluene	100	340	Phenolic
Toluene Dilsocyanate	100	340	Phenolic
Trichloroacetic Acid	100	340	Phenolic
Trichloroethylene	100	340	Phenolic
Tricresyl Phosphate	100	340	Phenolic
Triethanolamine	100	340	Phenolic
Trisodium Phosphate	100	340	Phenolic
Urea	100	340	Phenolic
Vanillin	100	340	Phenolic
Vinegar	100	340	Phenolic
Vinyl Acetate	100	340	Phenolic
Vinyl Chloride	100	340	Phenolic
Whiskey	100	340	Phenolic
Wine	100	340	Phenolic
Xylene	100	340	Phenolic
Zinc Ammonium Chloride	100	340	Phenolic
Zinc Chloride	100	340	Phenolic
Zinc Nitrate	100	340	Phenolic
Zinc Oxide	100	340	Phenolic
Zinc Sulfate	100	340	Phenolic