



Phenolic/Epoxies Chemical Resistance Data

A= No Effect or Excellent

B= Minor Effect or Good

C= Moderate Effect or Fair

D= Severe Effect or Not Recommended

Chemical/Agent	Epoxy	Phenolic
Acetaldehyde	A	A
Acetamide	A	-
Acetate Solv.	A	-
Acetic Acid, Glacial	B	-
Acetic Acid 20%	B	-
Acetic Acid 80%	B	-
Acetic Acid	A	-
Acetic Anhydride	A	A
Acetone	B	-
Acetyl Chloride	A	-
Acetylene	A	A
Acrylonitrile	A	-
ALCOHOLS		
Amyl	A	A
Benzyl	A	A
Butyl	A	A
Diacetone	A	A
Ethyl	A	A
Hexyl	A	A
Isobutyl	A	C
Isopropyl	A	A
Methyl	A	A
Octyl	A	A
Propyl	A	C
Aluminum Chloride 20%	A	D
Aluminum Chloride	A	D
Aluminum Flouride	A	
Aluminun Hydroxide	A	A
Alum Potassium Sulfate (ALUM), 10%	A	-
Alum Potassium Sulfate (ALUM) 100%	A	-



Aluminum Sulfate	A	A
Amines	A	-
Ammonia 10%	B	-
Ammonia Anhydrous	A	A
Ammonia, Liquids	A	A
Ammonia, Nitrate	A	A
Ammonium Bifluoride	A	A
Ammonium Carbonate	A	D
Ammonium Casenite	A	-
Ammonium Chloride	A	A
Ammonium Hydroxide	A	A
Ammonium Nitrate	A	C
Ammonium Oxalate	A	-
Ammonium Persulfate	A	C
Ammonium Phosphate, Dibasic	A	A
Ammonium Phosphate, Monobasic	A	A
Ammonium Phosphate, Tribasic	A	A
Ammonium Sulfate	A	A
Ammonium Thio-Sulfate	A	A
Amyl-Acetate	A	-
Amyl Alcohol	A	A
Amyl Chloride	A	-
Aniline	A	-
Anti-Freeze	A	B
Antimony Trichloride	A	-
Aqua Regia		D
(80%, HCl, 20%, HNO)	D	-
Arochlor 1248	A	-
Aromatic Hydrocarbons	A	A
Arsenic Acid	A	A
Asphalt	A	D
Barium Carbonate	A	-
Barium Chloride	A	A
Barium Cyanide	A	-
Barium Hydroxide	A	A
Barium Nitrate	B	D
Barium Sulfate	B	-
Barium Sulfide	A	-



Beer	A	A
Beet Sugar Liquids	A	A
Benzaldehyde	A	-
Benzene	A	C
Benzoic Acid	A	C
Benzol	A	A
Borax (Sodium Borate)	A	D
Boric Acid	A	A
Brewery Slop	A	A
Bromine (Wet)	C	D
Butadiene	A	-
Butanes	A	-
Butanol	-	-
Butter	A	D
Buttermilk	A	-
Butylene	A	A
Butyl Acetate	A	D
Butyric Acid	A	A
Calcium Bisulfate	A	-
Calcium Bisulfide	A	-
Calcium Bisufite	-	-
Calcium Carbonate	A	-
Calcium Chlorate	A	-
Calcium Chloride	A	A
Calcium Hydroxide	A	-
Calcium Hypochlorite	A	A
Calcium Sulfate	A	
Calgon	A	D
Cane Juice	A	A
Carbolic Acid (See Phenol)	-	-
Carbon Bisulfide	A	-
Carbon Dioxide (Wet)	-	-
Carbon Disulfide	A	-
Carbon Monoxide	A	-
Carbon Tetrachloride	C	A
Carbonated Water	A	-
Carbonic	A	A
Catsup	A	D



Chloroacetic Acid	B	-
Chloric Acid	D	-
Chlorinated Glue	A	D
Chlorine,		D
Anhydrous Liquid	B	-
Chlorine (Dry)	D	-
Chlorine Water	-	-
Chlorobenzene (Mono)	A	-
Chlorosulfonic Acid	C	-
Chlorox (Bleach)	A	D
Chocolate Syrup	A	D
Chromic Acid 5%	B	C
Chromic Acid 10%	C	-
Chromic Acid 30%	D	-
Chromic Acid 50%	C	C
Cider	A	D
Citric Acid	A	B
Citric Oils	A	-
Coffee	A	-
Copper Chloride	A	D
Copper Cyanide	C	B
Copper Fluoborate	A	B
Copper Nitrate	A	A
Copper Sulfate		-
(5% Solution)	A	-
Copper Sulfate	A	B
Cream	A	B
Cresols	A	-
Cresylic Acid	A	-
Cyclohexane	A	-
Cyanic Acid	A	-
Detergents	A	-
Dichloroethane	A	-
Diesel Fuel	A	-
Diethylamine	A	-
Diethylene Glycol	A	-
Diphenyl Oxide	A	-
Dyes	A	-



Epsom Salts(Magnesium Sulfate)	A	A
Ethane	A	-
Ethanolamine	A	B
Ether	A	-
Ethyl Acetate	A	A
Ethyl Chloride	A	D
Ethyl Sulfate	A	-
Ethylene Chloride	A	-
Ethylene Dichloride	A	-
Ethylene Glycol	A	B
Ethylene Oxide	A	-
Fatty Acids	A	D
Ferric Chloride	A	B
Ferric Nitrate	A	-
Ferric Sulfate	A	-
Ferrous Chloride	A	A
Ferrous Sulfate	A	A
Fluboric Acid	A	A
Fluorine	D	-
Fluosilicic Acid	C	-
Formaldehyde 40%	A	-
Formaldehyde	A	C
Formic Acid	B	B
Freon 11	A	C
Freon 12 (wet)	A	D
Freon 22	A	-
Freon 113	A	-
Freon T.F.	A	-
Fruit Juice	A	-
Fuel Oils	A	-
Furan Resin	A	A
Furfural	A	A
Gallic Acid	-	-
Gasoline	A	A
Gelatin	A	D
Glucose	A	A
Glue P.V.A.	A	-
Glycerine	A	A



Cycolic Acid	A	-
Gold Monocyanide	A	A
Grape Juice	A	A
Grease	A	-
Heptane	A	-
Hexane	A	-
Honey	A	-
Hydraulic Oils (Petroleum)	A	-
Hydraulic Oils (Synthetic)	A	-
Hydrazine	A	A
Hydrobromic Acid 20%	B	-
Hydrobromic Acid	A	D
Hydrochloric Acid		-
(Dry Gas)	A	-
Hydrochloric Acid (20%)	A	A
Hydrochloric Acid (37%)	A	C
Hydrochloric Acid 100%	A	-
Hydrocyanic Acid	A	-
Hydrocyanic Acid (Gas 10%)	A	-
Hydrofluoric Acid (20%)	B	D
Hydrofluoric Acid (75%)	C	D
Hydrofluoric Acid 100%	A	-
Hydrofluosilicic Acid (20%)	C	D
Hydrofluosilicic Acid	-	-
Hydrogen Gas	A	-
Hydrogen Peroxide 10%	D	-
Hydrogen Peroxide 30%	B	-
Hydrogen Peroxide	A	D
Hydrogen Sulfide, Aqueous Solution	A	D
Hydrogen Sulfide (Dry)	A	-
Hydroxyacetic Acid (70%)	A	-
Ink	A	-
Iodine	A	-
Iodine (In Alcohol)	-	-
Iodoform	-	-
Isotane	A	-
Isopropyl Acetate	A	-
Isopropyl Ether 2	-	-



Jet Fuel (JP3,JP4,JP5)	A	D
Kerosene	A	A
Ketones	C	A
Lacquers	A	A
Lacquer Thinners	-	-
Lactic Acid	A	-
Lard	A	D
Latex	A	D
Lead Acetate	A	-
Lead Sulfamate	A	-
Ligroin	A	-
Lime	A	D
Lubricants	A	A
Magnesium Carbonate	A	-
Magnesium Chloride	A	A
Magnesium Hydroxide	A	D
Magnesium Nitrate	A	-
Magnesium Oxide	A	-
Magnesium Sulfate	A	A
Maleic Acid	A	-
Maleic Anhydride	A	-
Malic Acid	-	-
Mash	A	-
Mayonnaise	A	-
Melamine	A	-
Mercuric Chloride (Dilute Solution)	A	A
Mercuric Cyanide	A	
Mercury	A	D
Methanol (See Alcohol Methyl)	-	-
Methyl Acetate	-	-
Methyl Acrylate	A	-
Methyl Acetone	C	-
Methyl Alcohol 10%	A	-
Methyl Bromide	B	-
Methyl Butyl Ketone	B	-
Methyl Cellosolve	C	-
Methyl Chloride	A	-
Methyl Dichloride	A	-



Methyl Ethyl Ketone	B	A
Methyl Isobutyl Ketone	B	-
Methyl Isopropyl Ketone	B	-
Methyl Methacrylate	A	-
Methylamine	A	-
Methylene Chloride	A	-
Milk	A	A
Molasses	A	A
Mustard	A	D
Naptha	A	A
Napthalene	A	A
Nickel Chloride	A	A
Nickel Sulfate	A	C
Nitric Acid (10% Solution)	A	-
Nitric Acid (20% Solution)	B	-
Nitric Acid (50% Solution)	D	-
Nitric Acid (Concentrated Solution)	D	-
Nitrobenzene	B	-
OILS		-
Aniline	A	D
Anise	A	-
Bay	A	-
Bone	A	-
Castor	A	-
Cinnamon	A	A
Citric	A	-
Clove	A	A
Coconut	A	A
Cod Liver	A	A
Corn	A	-
Cotton Seed	A	A
Cresote	A	-
Diesel Fuel (2D,3D,4D,5D)	A	-
Fuel (1,2,3,5A,5B,6)	A	-
Ginger	A	A
Hydraulic (See Hydraulic)		-
Lemon	A	A
Linseed	A	A



Mineral	A	A
Olive	A	A
Orange	A	A
Palm	A	A
Peanut	A	A
Peppermint	A	A
Pine	A	A
Rape Seed	A	A
Rosin	A	A
Sesame Seed	A	A
Silicone	A	A
Soybean	A	A
Sperm	A	A
Tanning	A	A
Turbine	A	A
Oleic Acid	A	-
Oleum 25%	D	-
Oleum	A	-
Oxalic Acid (cold)	A	-
Paraffin	A	-
Pentane	A	-
Perchloroethylenen	A	D
Petrolatum	A	-
Phenol 10%	C	-
Phenol (Carbolic Acid)	B	D
Phosphoric Acid (to 40% Solution)	A	-
Phosphoric Acid (40%-100% Solution)	C	-
Phosphoric Acid (Crude)	A	D
Phosphoric Anhydride (Dry or Moist)	-	-
Phosphoric Anhydride (Molten)	A	-
Photographic (Developer)	A	A
Phthalic Anhydride	-	-
Picric Acid	A	-
PLATING SOLUTIONS		-
Antimony Plating 130° F	B	A
Arsenic Plating 110° F	B	A
BRASS PLATING		-
Regular Brass Bath 100° F	B	A



High Speed Brass Bath 110° F	B	-
BRONZE PLATING		
Copper-Cadmium Bronze Bath R.T.	B	A
Copper-Tin Bronze Bath 160° F	C	A
Copper-Zinc Bronze Bath 100° F	B	A
CADMIUM PLATING		
Cyanide Bath 90° F	B	-
Fluoborate Bath 100° F	B	A
CHROMIUM PLATING		
Chromic-Sulfuric Bath 130° F	D	-
Fluosilicate Bath 95° F	D	-
Fluoride Bath 130° F	D	-
Black Chrome Bath 115° F	D	-
Barrel Chrome Bath 95° F	D	-
COPPER PLATING (Cyanide)		
Copper Strike Bath 120° F		-
Rochelle Salt Bath 150° F	C	-
High Speed Bath 180° F	C	-
COPPER PLATING (Acid)		
Copper Sulfate Bath R.T.	D	-
Copper Fluoborate Bath 120° F	D	A
COPPER (Misc.)		
Copper Pyrophosphate 140° F	B	-
Copper (Electroless) 140° F	B	-
GOLD PLATING		
Cyanide 150° F	D	-
Neutral 75° F	A	-
Acid 75° F	A	-
Indium Sulfamate Plating R.T.	A	-
IRON PLATING		
Ferrous Chloride Bath 190° F	D	-
Ferrous Sulfate Bath 150° F	D	A
Ferrous Am. Sulfate Bath 150° F	D	A
Sulfate-Chloride Bath 160° F	D	A
Fluoborate Bath 145° F	D	-
Sulfamate 140° F	A	-
Lead Fluoborate Plating	A	A
NICKEL PLATING		



Watts Type 115-160° F	D	-
High Chloride 130-160° F	D	-
Fluoborate 100-170° F	D	A
Sulfamate 100-140° F	A	-
Electroless 200 ° F	B	-
Rhodium Plating 120° F	A	-
Silver Plating 80-120° F	A	A
Tin-Fluoborate Plating 100° F	A	A
Tin-Lead Plating 100° F	A	-
ZINC PLATING		
Acid Chloride 140° F	A	-
Acid Sulfate Bath 150° F	D	A
Acid Fluoborate Bath R.T.	A	-
Alkaline Cyanide Bath R.T.	A	-
Potash	A	C
Potassium Bicarbonate	A	A
Potassium Bromide	A	-
Potassium Carbonate	A	A
Potassium Chlorate	A	
Potassium Chloride	A	A
Potassium Chromate	C	D
Potassium Cyanide Solutions	A	D
Potassium Dichromate	A	D
Potassium Ferrocyanide	A	-
Potassium Hydroxide (50%)	A	C
Potassium Nitrate	A	-
Potassium Permanganate	B	A
Potassium Sulfate	A	A
Potassium Sulfide	-	-
Propane (Liquified)	A	-
Propylene Glycol	A	A
Pyridine	A	-
Pyrogallic Acid	A	-
Rosins	A	-
Rum	A	A
Rust Inhibitors	A	A
Salad Dressing	A	D
Sea Water	A	A



Shellac (Bleached)	A	-
Shellac (Orange)	A	-
Silicone	A	-
Silver Bromide	A	-
Silver Nitrate	A	A
Soap Solutions	A	A
Soda Ash (See Sodium Carbonate)		
Sodium Acetate	A	-
Sodium Aluminate	A	-
Sodium Bicarbonate	A	A
Sodium Bisulfate	A	A
Sodium Bisulfite	A	D
Sodium Borate	-	-
Sodium Carbonate	A	-
Sodium Chlorate	A	-
Sodium Chloride	A	A
Sodium Chromate	C	D
Sodium Cyanide	A	A
Sodium Fluoride	A	-
Sodium Hydrosulfite	-	-
Sodium Hydroxide (20%)	A	C
Sodium Hydroxide (50% Solution)	A	D
Sodium Hydroxide (80% Solution)	A	D
Sodium Hypochlorite (to 20%)	B	D
Sodium Hypochlorite	A	-
Sodium Hyposulfate	C	-
Sodium Metaphosphate	A	A
Sodium Metasilicate	A	
Sodium Nitrate	A	A
Sodium Perborate	A	A
Sodium Peroxide	A	A
Sodium Polyphosphate (Mono, Di , Tribasic)	A	A
Sodium Silicate	A	A
Sodium Sulfate	A	A
Sodium Sulfide	A	D
Sodium Sulfite	A	A
Sodium Tetraborate	A	-



Sodium Thiosulphate ("Hypo")	A	A
Sorghum	A	D
Soy Sauce	A	D
Stannic Chloride	A	-
Stannic Fluoborate	A	A
Stannous Chloride	A	-
Starch	A	A
Stearic Acid	A	-
Stoddard Solvent	A	D
Styrene	A	-
Sugar (Liquids)	A	-
Sulfate Liquors	A	-
Sulfur Chloride	C	-
Sulfur Dioxide 2	A	A
Sulfur Dioxide (Dry)	D	-
Sulfur Trioxide (Dry)	A	-
Sulfuric Acid (to 10%)	A	D
Sulfuric Acid (10%-75%)	B	D
Sulfuric Acid 75%-100%	D	D
Sulfurous Acid	A	D
Sulfuryl Chloride	A	-
Syrup	A	-
Tallow	A	-
Tannic Acid	A	-
Tanning Liquors	A	C
Tartaric Acid	A	A
Tetrachlorethane	A	-
Tetrahydrofuran	A	-
Toluene, Toluol	A	A
Tomato Juice	A	-
Trichlorethane	A	-
Trichlorethylene	A	A
Trichloropropane	A	-
Tricresylphosphate	A	-
Triethylamine	A	-
Turpentine	A	-
Urine	A	A
Vegetable Juice	A	A



Vinegar	A	-
Varnish (Use Viton® for Aromatic)	A	-
Water, Acid , Mine	A	-
Water, Distilled , Lab Grade	A	A
Water, Fresh	A	A
Water, Salt	A	A
Weed Killers	A	-
Whey	A	-
Whiskey and Wines	A	A
White Liquor (Pulp Mill)	A	A
White Water (Paper Mill)	A	-
Xylene	A	A
Zinc Chloride	A	A
Zinc Hydrosulphite	A	A
Zinc Hydrosulfate	A	-
Zinc Sulfate	A	A