304 Stainless Steel Chemical Compatibility Chart

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Chemical	
Acetaldehyde	A
Acetamide	B
Acetate Solvent	A
Acetic Acid	D
Acetic Acid, 20%	B
Acetic Acid, 80%	D
Acetic Acid, Glacial	C
Acetic Anhydride	B
Acetone	A
Acetyl Chloride, dry	A
Acetylene	A
Acrylonitrile	A
Adipic Acid	A
Alcohol, Amyl	A
Alcohol, Benzyl	B
Alcohol, Butyl	A
Alcohol, Diacetone	A
Alcohol, Ethyl	A
Alcohol, Hexyl	A
Alcohol, Isobutyl	A
Alcohol, Isopropyl	B
Alcohol, Methyl	A
Alcohol, Octyl	A
Alcohol, Propyl	A
Aluminum Chloride	B
Aluminum Chloride, 20%	D
Aluminum Fluoride	D
Aluminum Hydroxide	A
Aluminum Potassium Sulfate, 10%	A
Aluminum Potassium Sulfate, 100%	D
Aluminum Sulfate	B
Amines	A
Ammonia, 10%	A
Ammonia Nitrate	A
Ammonia, anhydrous	A

Chemical	
Ammonia, liquid	B
Ammonium Acetate	B
Ammonium Bifluoride	D
Ammonium Carbonate	B
Ammonium Chloride	C
Ammonium Hydroxide	A
Ammonium Nitrate	A
Ammonium Oxalate	A
Ammonium Persulfate	A
Ammonium Phosphate, Dibasic	B
Ammonium Phosphate, Monobasic	B
Ammonium Phosphate, Tribasic	B
Ammonium Sulfate	B
Ammonium Sulfite	B
Amyl Acetate	A
Amyl Alcohol	A
Amyl Chloride	A
Aniline	A
Aniline Hydrochloride	D
Antimony Trichloride	D
Aqua Regia (80% HCl, 20% HNO_3)	D
Arochlor™ 1248	B
Arsenic Acid	A
Asphalt	B
Barium Carbonate	B
Barium Chloride	A
Barium Cyanide	A
Barium Hydroxide	B
Barium Nitrate	B
Barium Sulfate	B
Barium Sulfide	B
Beer	A
Beet Sugar Liquids	A
Benzaldehyde	B
Benzene	B

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Chemical	
Benzene Sulfonic Acid	B
Benzoic Acid	B
Benzol	A
Benzonitrile	D
Benzyl Chloride	C
Bleach (sodium hypochlorite, 5.25%)	C
Borax (sodium borate)	A
Boric Acid	B
Brewery Slop	A
Bromine	D
Butadiene	A
Butane	A
Butanol (butyl alcohol)	A
Butter	C
Buttermilk	A
Butyl Phthalate	B
Butyl Acetate	B
Butylene	A
Butyric Acid	B
Calcium Bisulfide	B
Calcium Bisulfite	B
Calcium Carbonate	A
Calcium Chloride	C
Calcium Hydroxide	B
Calcium Hypochlorite	C
Calcium Nitrate	C
Calcium Oxide (lime)	A
Calcium Sulfate	B
Calgon	A
Cane Juice	A
Carbolic Acid (phenol)	B
Carbon Bisulfide	A
Carbon Dioxide, dry	A
Carbon Dioxide, wet	A
Carbon Disulfide	A

Chemical	
Carbon Monoxide Gas	A
Carbon Tetrachloride	B
Carbon Tetrachloride, dry	B
Carbon Tetrachloride, wet	A
Carbonated Water	A
Carbonic Acid	A
Catsup	A
Chloric Acid	D
Chlorine, dry	A
Chlorine Water	C
Chlorine, anhydrous liquid	C
Chloroacetic Acid	B
Chlorobenzene, mono	A
Chloroform	A
Chlorosulfonic Acid	D
Chocolate Syrup	A
Chromic Acid, 5%	B
Chromic Acid, 10%	B
Chromic Acid, 30%	B
Chromic Acid, 50%	C
Cider	A
Citric Acid	B
Citric Oils (citrus oils, limonene)	A
Clorox® (bleach, sodium hypochlorite, 5.25%)	A
Coffee	A
Copper Chloride	D
Copper Cyanide	B
Copper Fluoborate	D
Copper Nitrate	A
Copper Sulfate, >5%	B
Copper Sulfate, 5%	B
Cream	A
Cresols	A
Cresylic Acid	A
Cupric Acid	D

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Chemical	
Cyanic Acid	A
Cyclohexane	A
Cyclohexanone	A
Detergents	A
Diacetone Alcohol	B
Dichloroethane	B
Diesel Fuel (20, 30, 40, 50)	A
Diethyl Ether	B
Diethylamine	A
Diethylene Glycol	A
Dimethyl Aniline	B
Dimethyl Formamide	A
Diphenyl	B
Diphenyl Oxide	B
Dyes	A
Epsom Salts (magnesium sulfate)	A
Ethane	A
Ethanol (ethyl alcohol)	A
Ethanolamine	A
Ether	A
Ethyl Acetate	B
Ethyl Chloride	A
Ethyl Ether	B
Ethyl Sulfate	D
Ethylene Bromide	A
Ethylene Chloride	B
Ethylene Chlorohydrin	B
Ethylene Diamine	B
Ethylene Dichloride	B
Ethylene Glycol	B
Ethylene Oxide	B
Fatty Acids	B
Ferric Chloride	D
Ferric Nitrate	B
Ferric Sulfate	B

Chemical	
Ferrous Chloride	D
Ferrous Sulfate	B
Fluoboric Acid	B
Fluorine Gas	C
Fluosilicic Acid	C
Formaldehyde, 40%	A
Formaldehyde, 100%	C
Formic Acid	B
Freon 11 Trichlorofluoromethane	A
Freon 12 Dichlorodifluoromethane	B
Freon 22 Chlorodifluoromethane	A
Freon TF Trichlorotrifluoroethane	A
Fruit Juice	A
Fuel Oils (1, 2, 3, 5A, 5B, 6)	A
Furan Resin	A
Furfural	A
Gallic Acid	A
Gasoline, high aromatic	A
Gasoline, leaded	A
Gasoline, unleaded	A
Gelatin	A
Glucose	A
Glue (PVA, polyvinyl acetate)	A
Glycerin	A
Glycolic Acid	A
Gold Monocyanide	A
Grape Juice	A
Heptane	A
Hexane	A
Honey	A
Hydraulic Oil, petroleum	A
Hydraulic Oil, synthetic	A
Hydrazine	A
Hydrobromic Acid, 20%	D
Hydrobromic Acid, 100%	D

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Chemical	
Hydrochloric Acid, 20%	D
Hydrochloric Acid, 37%	D
Hydrochloric Acid, 100%	D
Hydrochloric Acid, dry gas	D
Hydrocyanic Acid	B
Hydrofluoric Acid, 20%	D
Hydrofluoric Acid, 50%	D
Hydrofluoric Acid, 75%	D
Hydrofluoric Acid, 100%	B
Hydrofluosilicic Acid, 20%	C
Hydrofluosilicic Acid, 100%	D
Hydrogen Gas	A
Hydrogen Peroxide, 10%	B
Hydrogen Peroxide, 30%	B
Hydrogen Peroxide, 50%	B
Hydrogen Peroxide, 100%	B
Hydrogen Sulfide, aqueous	C
Hydrogen Sulfide, dry	C
Hydroquinone	B
Ink	C
Iodine	D
Iodoform	A
Isooctane	A
Isopropyl Acetate	C
Isopropyl Ether	A
Jet Fuel (JP3, JP4, JP5)	A
Kerosene	A
Ketones	A
Lacquer Thinners	A
Lacquers	A
Lactic Acid	B
Lard (animal fat)	A
Latex	A
Lead Acetate	B
Lead Nitrate	B

Chemical	
Lead Sulfamate	C
Lemon Oil (citrus oils, limonene)	A
Lime (calcium oxide)	A
Linoleic Acid	B
Lithium Chloride	A
Lithium Hydroxide	B
Lubricants	A
Lye, $Ca(OH)_2$ (calcium hydroxide)	B
Lye, KOH (potassium hydroxide)	B
Lye, NaOH (sodium hydroxide)	B
Magnesium Bisulfate	A
Magnesium Carbonate	B
Magnesium Chloride	D
Magnesium Hydroxide	B
Magnesium Nitrate	B
Magnesium Oxide	A
Magnesium Sulfate (Epsom salts)	A
Maleic Acid	A
Maleic Anhydride	A
Malic Acid	A
Manganese Sulfate	B
Mash (brewing)	A
Mayonnaise	C
Mercuric Chloride, dilute	D
Mercuric Cyanide	C
Mercurous Nitrate	A
Mercury	A
Methane Gas (natural gas)	A
Methanol (methyl alcohol, wood alcohol)	A
Methyl Acetate	A
Methyl Acetone	A
Methyl Acrylate	A
Methyl Alcohol, 10%	A
Methyl Bromide	A
Methyl Butyl Ketone (MBK)	A

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Methyl Cellosolve	B
Methyl Chloride	A
Methyl Ethyl Ketone (MEK)	A
Methyl Isobutyl Ketone	B
Methyl Isopropyl Ketone	A
Methyl Methacrylate	B
Methylamine	A
Methylene Chloride	B
Milk	A
Mineral Spirits	A
Molasses, crude	A
Molasses, edible	A
Monochloroacetic Acid	A
Monoethanolamine	A
Motor Oil	A
Mustard	A
Naphtha	A
Naphthalene	A
Natural Gas (methane gas)	A
Nickel Chloride	D
Nickel Nitrate	B
Nickel Sulfate	B
Nitrating Acid, <15% HNO_3	C
Nitrating Acid, >15% H_2SO_4	C
Nitrating Acid, <1% Acid	C
Nitrating Acid, <15% H_2SO_4	C
Nitric Acid, 5-10%	A
Nitric Acid, 20%	A
Nitric Acid, 50%	A
Nitric Acid, concentrated	A
Nitrobenzene	B
Nitromethane	A
Nitrous Acid	B
Nitrous Oxide Gas	B
Oil, Aniline	A

Chemical	
Oil, Castor	A
Oil, Cinnamon	A
Oil, Citric (citrus oils, limonene)	A
Oil, Clove	A
Oil, Coconut	A
Oil, Cod Liver	A
Oil, Corn	A
Oil, Cottonseed	A
Oil, Creosote	B
Oil, Ginger	D
Oil, Hydraulic Oil (petroleum)	A
Oil, Hydraulic Oil (synthetic)	A
Oil, Lemon (citrus oils, limonene)	A
Oil, Linseed	A
Oil, Mineral	A
Oil, Motor	A
Oil, Olive	A
Oil, Orange (citrus oils, limonene)	A
Oil, Palm	A
Oil, Peanut	A
Oil, Peppermint	A
Oils: Pine	A
Oil, Rapeseed	A
Oil, Rosin	A
Oil, Sesame Seed	A
Oil, Silicone	A
Oil, Soybean	A
Oil, Tanning	A
Oil, Transformer	A
Oil, Turbine	A
Oils, Animal	A
Oils, Diesel Fuel (20, 30, 40, 50)	A
Oils, Fuel (1, 2, 3, 5A, 5B, 6)	A
Oils, Hydraulic (petroleum)	A
Oils, Hydraulic (synthetic)	A

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Chemical	
Oils, Lubricating	A
Oils, Mineral	A
Oils, Vegetable	A
Oils and Fats	A
Oleic Acid	A
Oleum, 25%	B
Oleum, 100%	A
Oxalic Acid, cold	B
Ozone Gas	B
Palmitic Acid	B
Paraffin	A
Pentane	C
Perchloric Acid	C
Perchloroethylene	B
Petrolatum	A
Petroleum	A
Phenol, 10% (carbolic acid)	B
Phenol (carbolic acid)	B
Phosphoric Acid, <40%	D
Phosphoric Acid, >40%	D
Phosphoric Acid, crude	D
Phosphorus	A
Phosphorus Trichloride	A
Photographic Developer	A
Photographic Solutions	D
Phthalic Acid	B
Phthalic Anhydride	A
Picric Acid	B
Plating Solutions, Antimony Plating 130°F (54°C)	A
Plating Solutions, Arsenic Plating 110°F (43°C)	A
Potash (potassium carbonate)	B
Potassium Bicarbonate	B
Potassium Bromide	B
Potassium Chlorate	B
Potassium Chloride	B

Chemical	
Potassium Chromate	B
Potassium Cyanide Solutions	B
Potassium Dichromate	B
Potassium Ferricyanide	B
Potassium Ferrocyanide	B
Potassium Hydroxide (Lye, caustic potash)	B
Potassium Hypochlorite	C
Potassium Iodide	A
Potassium Nitrate	B
Potassium Oxalate	B
Potassium Permanganate	B
Potassium Sulfate	B
Potassium Sulfide	B
Propane, liquefied	A
Propylene	B
Propylene Glycol	B
Pyridine	A
Pyrogallic Acid	B
Rosins	A
Rum	A
Rust Inhibitors	A
Salad Dressings	A
Salicylic Acid	B
Salt Brine (NaCl, saturated)	B
Sea Water	C
Shellac, bleached	A
Shellac, orange	A
Silicone	A
Silver Bromide	D
Silver Nitrate	B
Soap Solutions	A
Soda Ash (sodium carbonate)	A
Sodium Acetate	B
Sodium Aluminate	A
Sodium Bicarbonate	A

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Chemical	
Sodium Bisulfate	D
Sodium Bisulfite	B
Sodium Borate (Borax)	B
Sodium Bromide	C
Sodium Carbonate	A
Sodium Chlorate	A
Sodium Chloride	B
Sodium Chromate	B
Sodium Cyanide	A
Sodium Ferrocyanide	B
Sodium Fluoride	D
Sodium Hydroxide, 20%	B
Sodium Hydroxide, 50%	B
Sodium Hydroxide, 80%	C
Sodium Hypochlorite, <20%	C
Sodium Hypochlorite, 100%	D
Sodium Hyposulfate	A
Sodium Metaphosphate	A
Sodium Metasilicate	A
Sodium Nitrate	B
Sodium Perborate	B
Sodium Peroxide	A
Sodium Polyphosphate	B
Sodium Silicate	A
Sodium Sulfate	B
Sodium Sulfide	B
Sodium Sulfite	B
Sodium Tetraborate	A
Sodium Thiosulfate, hypo	A
Sorghum	A
Soy Sauce	A
Stannic Chloride	D
Stannous Chloride	C
Starch	A
Stearic Acid	B

Chemical	
Stoddard Solvent	A
Styrene	A
Sugar Liquids	A
Sulfate Liquors	B
Sulfur Chloride	D
Sulfur Dioxide	D
Sulfur Dioxide, dry	D
Sulfur Trioxide	A
Sulfur Trioxide, dry	D
Sulfuric Acid, <10%	D
Sulfuric Acid, 10-75%	D
Sulfuric Acid, 75-100%	C
Sulfuric Acid, cold concentrated	C
Sulfuric Acid, hot concentrated	D
Sulfurous Acid	B
Tallow	A
Tannic Acid	B
Tanning Liquors	A
Tartaric Acid	C
Tetrachloroethane	B
Tetrahydrofuran	A
Toluene (toluol)	A
Tomato Juice	A
Trichloroacetic Acid	D
Trichloroethane	B
Trichloroethylene	B
Trichloropropane	A
Tricresylphosphate	B
Triethylamine	A
Trisodium Phosphate	B
Turpentine	A
Urea	B
Uric Acid	B
Urine	A
Varnish	A

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Vegetable Juices	A
Vinegar	A
Vinyl Acetate	B
Vinyl Chloride	B
Water, acid mine	B
Water, deionized (demineralized water)	A
Water, distilled	A
Water, fresh	A
Water, salt	B
Weed Killers	A
Whey	A
Whiskey and Wines	A
White Liquor, pulp mill	A
White Water, paper mill	A
Xylene	B
Zinc Chloride	B
Zinc Hydrosulfite	A
Zinc Sulfate	B

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