

RYTON (PPS) Chemical Compatibility & Chemical Resistance Chart

Explanation of Footnotes

1. Satisfactory to 72°F (22°C)
2. Satisfactory to 120°F (48°C)

Ratings -- Chemical Effect

- **A = Excellent.**
- **B = Good** -- Minor Effect, slight corrosion or discoloration.
- **C = Fair** -- Moderate Effect, not recommended for continuous use. Softening, loss of strength, swelling may occur.
- **D = Severe Effect**, not recommended for ANY use.
- **N/A** = Information not available.

Chemical	Compatibility
Acetaldehyde	A-Excellent
Acetamide	A-Excellent
Acetate Solvent	A-Excellent
Acetic Acid	A-Excellent
Acetic Acid 20%	A-Excellent
Acetic Acid 80%	A-Excellent
Acetic Acid, Glacial	A-Excellent
Acetic Anhydride	A-Excellent
Acetone	A-Excellent
Acetone, 50% water	A-Excellent
Acetyl Chloride (dry)	A-Excellent
Acetylene	A-Excellent
Alcohols: Amyl	A-Excellent
Alcohols: Benzyl	A-Excellent
Alcohols: Butyl	A-Excellent
Alcohols: Methyl	A-Excellent
Alcohols: Propyl	A-Excellent
Aluminum Acetate (saturated)	A-Excellent
Aluminum Chloride	A-Excellent
Aluminum Chloride 20%	A-Excellent
Aluminum Fluoride	A-Excellent
Aluminum Sulfate	A-Excellent
Amines	B-Good
Ammonia 10%	A ¹ -Excellent
Ammonia Nitrate	A-Excellent
Ammonia, anhydrous	A ¹ -Excellent
Ammonia, liquid	A ¹ -Excellent
Ammonium Carbonate	A-Excellent
Ammonium Chloride	A-Excellent
Ammonium Hydroxide	A-Excellent
Ammonium Nitrate	A-Excellent

Ammonium Phosphate, Dibasic	A-Excellent
Ammonium Sulfate	A-Excellent
Amyl Acetate	A-Excellent
Amyl Alcohol	A-Excellent
Aniline	A-Excellent
Aqua Regia (80% HCl, 20% HNO ₃)	D-Severe Effect
Arsenic Acid	A-Excellent
Asphalt	A-Excellent
Barium Carbonate	A ² -Excellent
Barium Chloride	A-Excellent
Barium Hydroxide	A-Excellent
Barium Sulfate	A-Excellent
Beer	A ² -Excellent
Benzaldehyde	A-Excellent
Benzene	A-Excellent
Benzene Sulfonic Acid	A-Excellent
Benzoic Acid	A ¹ -Excellent
Benzol	A-Excellent
Bleach	D-Severe Effect
Borax (Sodium Borate)	A-Excellent
Boric Acid	A-Excellent
Bromine	D-Severe Effect
Butadiene	A ¹ -Excellent
Butane	A-Excellent
Butanol (Butyl Alcohol)	A-Excellent
Butyl Amine	D-Severe Effect
Butyl Ether	A ² -Excellent
Butyl Phthalate	A-Excellent
Butylacetate	A-Excellent
Butylene	A-Excellent
Butyric Acid	A-Excellent
Calcium Bisulfite	A-Excellent
Calcium Chloride (30% in water)	A-Excellent
Calcium Chloride (saturated)	A-Excellent
Calcium Hydroxide	A-Excellent
Calcium Hydroxide (saturated)	A-Excellent
Calcium Hydroxide 10%	A-Excellent
Calcium Hypochlorite	A-Excellent
Calcium Nitrate	A-Excellent
Calcium Oxide	A-Excellent
Calcium Sulfate	A-Excellent
Carbolic Acid (Phenol)	A-Excellent
Carbon Dioxide (dry)	A-Excellent
Carbon Dioxide (wet)	A-Excellent
Carbon Disulfide	A-Excellent
Carbon Tetrachloride	A-Excellent
Carbon Tetrachloride (dry)	A ² -Excellent

Carbon Tetrachloride (wet)	A ² -Excellent
Carbonic Acid	A-Excellent
Chlorine (dry)	D-Severe Effect
Chlorine Water	D-Severe Effect
Chlorine, Anhydrous Liquid	D-Severe Effect
Chloroacetic Acid	A-Excellent
Chlorobenzene (Mono)	A-Excellent
Chloroform	A-Excellent
Chlorosulfonic Acid	D-Severe Effect
Chromic Acid 10%	A-Excellent
Chromic Acid 30%	B-Good
Chromic Acid 5%	A-Excellent
Chromic Acid 50%	A ¹ -Excellent
Citric Acid	A-Excellent
Copper Chloride	A-Excellent
Copper Cyanide	A-Excellent
Copper Nitrate	A-Excellent
Copper Sulfate >5%	A-Excellent
Copper Sulfate 5%	A-Excellent
Cresols	A-Excellent
Cupric Acid	A-Excellent
Cyclohexane	A-Excellent
Cyclohexanone	A-Excellent
Detergents	A-Excellent
Dextrose	A-Excellent
Diesel Fuel	A-Excellent
Diethyl Ether	A-Excellent
Dimethyl Aniline	A-Excellent
Dimethyl Formamide	A-Excellent
Diphenyl Oxide	A-Excellent
Epsom Salts (Magnesium Sulfate)	A-Excellent
Ethanolamine	A-Excellent
Ether	A-Excellent
Ethyl Acetate	A-Excellent
Ethyl Chloride	A-Excellent
Ethyl Ether	A-Excellent
Ethylene Chloride	A-Excellent
Ethylene Diamine	A-Excellent
Ethylene Dichloride	A-Excellent
Ethylene Glycol	A-Excellent
Ethylene Oxide	D-Severe Effect
Ferric Chloride	A-Excellent
Ferric Nitrate	A-Excellent
Ferric Sulfate	A-Excellent
Ferrous Chloride	A-Excellent
Ferrous Sulfate	A-Excellent
Fluoboric Acid	A-Excellent

Fluorine	D-Severe Effect
Fluosilicic Acid	A-Excellent
Formaldehyde 100%	B-Good
Formaldehyde 40%	A-Excellent
Formic Acid	A-Excellent
Freon® 11	A-Excellent
Freon® 113	A-Excellent
Freon® 12	A-Excellent
Freon® 22	A-Excellent
Freon® TF	D-Severe Effect
Fuel Oils	A-Excellent
Furan Resin	A-Excellent
Furfural	A-Excellent
Gallic Acid	A-Excellent
Gasoline (high-aromatic)	A-Excellent
Gasoline, leaded, ref.	A-Excellent
Gasoline, unleaded	A-Excellent
Glucose	B-Good
Glycerin	A-Excellent
Glycolic Acid	A-Excellent
Heptane	A-Excellent
Hexane	A-Excellent
Hydraulic Oil (Petro)	D-Severe Effect
Hydrobromic Acid 100%	A ¹ -Excellent
Hydrochloric Acid 100%	D-Severe Effect
Hydrochloric Acid 20%	D-Severe Effect
Hydrochloric Acid 37%	D-Severe Effect
Hydrochloric Acid, Dry Gas	D-Severe Effect
Hydrocyanic Acid	B-Good
Hydrofluoric Acid 100%	D-Severe Effect
Hydrofluoric Acid 20%	A-Excellent
Hydrofluoric Acid 50%	A-Excellent
Hydrofluoric Acid 75%	B-Good
Hydrofluosilicic Acid 100%	A ¹ -Excellent
Hydrofluosilicic Acid 20%	A-Excellent
Hydrogen Gas	A-Excellent
Hydrogen Peroxide 10%	A-Excellent
Hydrogen Peroxide 100%	C-Fair
Hydrogen Peroxide 30%	A ¹ -Excellent
Hydrogen Sulfide (aqua)	A-Excellent
Hydrogen Sulfide (dry)	A-Excellent
Iodine	D-Severe Effect
Isooctane	A-Excellent
Jet Fuel (JP3, JP4, JP5, JP8)	A-Excellent
Kerosene	A-Excellent
Ketones	A-Excellent
Lactic Acid	A-Excellent

Lead Acetate	A-Excellent
Lead Nitrate	A-Excellent
Lubricants	A-Excellent
Lye: Ca(OH) ₂ Calcium Hydroxide	A-Excellent
Lye: KOH Potassium Hydroxide	A-Excellent
Lye: NaOH Sodium Hydroxide	A-Excellent
Magnesium Chloride	A ¹ -Excellent
Magnesium Hydroxide	A-Excellent
Magnesium Nitrate	A-Excellent
Magnesium Sulfate (Epsom Salts)	A-Excellent
Maleic Acid	B-Good
Manganese Sulfate	A ² -Excellent
Mercuric Chloride (dilute)	A-Excellent
Mercuric Cyanide	A-Excellent
Methanol (Methyl Alcohol)	A-Excellent
Methyl Alcohol 10%	A-Excellent
Methyl Chloride	B-Good
Methyl Ethyl Ketone	A-Excellent
Methyl Isobutyl Ketone	A-Excellent
Methylene Chloride	A-Excellent
Mineral Spirits	A-Excellent
Monoethanolamine	A-Excellent
Morpholine	C-Fair
Motor Oil	A-Excellent
Naphtha	A-Excellent
Naphthalene	A-Excellent
Nickel Chloride	A-Excellent
Nickel Sulfate	A-Excellent
Nitrating Acid (<1% Acid)	C-Fair
Nitrating Acid (<15% H ₂ SO ₄)	C-Fair
Nitrating Acid (<15% HNO ₃)	C-Fair
Nitrating Acid (>15% H ₂ SO ₄)	D-Severe Effect
Nitric Acid (20%)	C-Fair
Nitric Acid (5 to 10%)	B ¹ -Good
Nitric Acid (50%)	C-Fair
Nitric Acid (Concentrated)	C-Fair
Nitrobenzene	A ² -Excellent
Nitromethane	A ² -Excellent
Oils: Cottonseed	A-Excellent
Oils: Crude Oil	A-Excellent
Oils: Diesel Fuel (20, 30, 40, 50)	A-Excellent
Oils: Fuel (1, 2, 3, 5A, 5B, 6)	A-Excellent
Oils: Hydraulic Oil (Petro)	D-Severe Effect
Oils: Linseed	B-Good
Oils: Mineral	A-Excellent
Oils: Silicone	A ¹ -Excellent
Oleic Acid	A-Excellent

Oleum 100%	A ¹ -Excellent
Oleum 25%	A ¹ -Excellent
Oxalic Acid (cold)	A-Excellent
Perchloroethylene	A-Excellent
Phenol (10%)	A-Excellent
Phenol (Carbolic Acid)	A-Excellent
Phosphoric Acid (<40%)	A-Excellent
Phosphoric Acid (>40%)	A-Excellent
Phosphoric Acid (crude)	A-Excellent
Phosphoric Acid Anhydride	D-Severe Effect
Phosphorus Trichloride	A-Excellent
Photographic Solutions	A ² -Excellent
Picric Acid	A-Excellent
Potassium Bicarbonate	A-Excellent
Potassium Bromide	A-Excellent
Potassium Chlorate	A-Excellent
Potassium Chloride	A-Excellent
Potassium Cyanide Solutions	A-Excellent
Potassium Dichromate	A-Excellent
Potassium Hydroxide (Caustic Potash)	A-Excellent
Potassium Hypochlorite	A-Excellent
Potassium Iodide	A ² -Excellent
Potassium Nitrate	A-Excellent
Potassium Permanganate	A-Excellent
Potassium Sulfate	A-Excellent
Potassium Sulfide	A-Excellent
Pyridine	A-Excellent
Salt Brine (NaCl saturated)	A-Excellent
Sea Water	A-Excellent
Silicone	A ¹ -Excellent
Silver Nitrate	A-Excellent
Soap Solutions	A-Excellent
Soda Ash (see Sodium Carbonate)	A-Excellent
Sodium Acetate	A-Excellent
Sodium Aluminate	A-Excellent
Sodium Bicarbonate	A-Excellent
Sodium Bisulfate	A-Excellent
Sodium Bisulfite	A-Excellent
Sodium Borate (Borax)	A-Excellent
Sodium Carbonate	A-Excellent
Sodium Chlorate	A-Excellent
Sodium Chloride	A-Excellent
Sodium Chromate	A-Excellent
Sodium Cyanide	A-Excellent
Sodium Hydroxide (20%)	A-Excellent
Sodium Hydroxide (50%)	A-Excellent
Sodium Hydroxide (80%)	A-Excellent

Sodium Hypochlorite (<20%)	A-Excellent
Sodium Hypochlorite (100%)	A-Excellent
Sodium Nitrate	A-Excellent
Sodium Silicate	A-Excellent
Sodium Sulfate	A-Excellent
Sodium Sulfide	A-Excellent
Sodium Thiosulfate (hypo)	A-Excellent
Stannic Chloride	A-Excellent
Stannous Chloride	A ¹ -Excellent
Stoddard Solvent	A-Excellent
Sulfur Dioxide	A-Excellent
Sulfur Dioxide (dry)	A-Excellent
Sulfuric Acid (<10%)	A-Excellent
Sulfuric Acid (10-75%)	A-Excellent
Sulfuric Acid (75-100%)	A ¹ -Excellent
Sulfuric Acid (cold concentrated)	A ¹ -Excellent
Sulfuric Acid (hot concentrated)	D-Severe Effect
Sulfurous Acid	A-Excellent
Tannic Acid	A-Excellent
Tartaric Acid	A-Excellent
Tetrahydrofuran	A-Excellent
Toluene (Toluol)	A-Excellent
Tomato Juice	A-Excellent
Trichloroacetic Acid	A-Excellent
Trichloroethylene	A ¹ -Excellent
Trisodium Phosphate	A-Excellent
Turpentine	A-Excellent
Urea	A-Excellent
Vinegar	A-Excellent
Water, Acid, Mine	A-Excellent
Water, Deionized	A-Excellent
Water, Distilled	A-Excellent
Water, Fresh	A-Excellent
Water, Salt	A-Excellent
Xylene	A-Excellent
Zinc Chloride	A-Excellent
Zinc Hydrosulfite	A-Excellent
Zinc Sulfate	A-Excellent

WARNING

The information in this chart has been supplied by reputable sources and is to be used ONLY as a guide in selecting equipment for appropriate chemical compatibility. Before permanent installation, test the equipment with the chemicals and under the specific conditions of your application.

Ratings of chemical behavior listed in this chart apply at a 48-hr exposure period. There exists no specific knowledge of possible effects beyond this period. There exists no warranty (neither express nor implied) that the information in this chart is accurate or complete or that any material is suitable for any purpose.

DANGER

Variations in chemical behavior during handling due to factors such as temperature, pressure, and concentrations can cause equipment to fail, even though it passed an initial test.

SERIOUS INJURY MAY RESULT

Use suitable guards and/or personal protections when handling chemicals.

Last Modified December 11, 2015