

Chemical Resistance Data for PPs

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
