

# BNL CHEMICAL STORAGE AND COMPATIBILITY TABLE

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Information contained in this table was compiled from the following sources: Academic Laboratory Chemical Hazards Guidebook by William J. Mahn, Published by Van Nostrand, Reinhold, 1991; Fire Protection Guide to Hazardous Materials 11th edition, National Fire Protection Association, 1994; Hazardtext® Hazard Managements Database; INFOTEXT® Documents Database; Better Science Through Safety by Jack A. Gerlovich and Gary E. Downs, © 1981 by the Iowa State University Press. Document Revision Date 07-24-07 Ken Erickson CHO

Chemical	Chemical Hazard and Compatibility Information
Acetic Acid	<b>HAZARDS &amp; STORAGE:</b> Corrosive and combustible liquid. Serious health hazard. Reacts with oxidizing and alkali materials. Keep above freezing point (62 °F) to avoid rupture of carboys and glass containers. <b>INCOMPATIBILITIES:</b> 2-amino-ethanol, Acetaldehyde, Acetic anhydride, <b>Acids</b> , Alcohol, Amines, 2-Amino-ethanol, Ammonia, Ammonium nitrate, 5-Azidotetrazole, Bases, Bromine pentafluoride, Caustics (strong), <b>Chlorosulfonic acid</b> , <b>Chromic Acid</b> , Chromium trioxide, Chlorine trifluoride, Ethylene imine, Ethylene glycol, Ethylene diamine, Hydrogen cyanide, Hydrogen peroxide, Hydrogen sulfide, Hydroxyl compounds, Ketones, <b>Nitric Acid</b> , Oleum, Oxidizers (strong), P(OCN) <sub>3</sub> , <b>Perchloric acid</b> , Permanganates, Peroxides, Phenols, Phosphorus isocyanate, Phosphorus trichloride, Potassium hydroxide, Potassium permanganate, Potassium-tert-butoxide, Sodium hydroxide, Sodium peroxide, <b>Sulfuric acid</b> , n-Xylene.
Acetone	<b>HAZARDS &amp; STORAGE:</b> Store in a cool, dry, well ventilated place. <b>INCOMPATIBILITIES:</b> Acids, Bromine trifluoride, Bromine, Bromoform, Carbon, Chloroform, Chromium oxide, Chromium trioxide, Chromyl chloride, Dioxygen difluoride, Fluorine oxide, Hydrogen peroxide, 2-Methyl-1,2-butadiene, NaOBr, Nitric acid, Nitrosyl chloride, Nitrosyl perchlorate, Nitryl perchlorate, NOCl, Oxidizing materials, Permonosulfuric acid, Peroxomonosulfuric acid, Potassium-tert-butoxide, Sulfur dichloride, Sulfuric acid, thio-Diglycol, Thiotriethiazyl perchlorate, Trichloromelamine, 2,4,6-Trichloro-1,3,5-triazine
Acetylene	<b>HAZARDS &amp; STORAGE:</b> Flammable gas. Forms explosive mixtures with air. Low ignition energy. Reacts with active metals to form explosive compounds. Isolate from oxidizing gases, especially chlorine. Do not store in copper or brass containers. <b>INCOMPATIBILITIES:</b> Brass, Bromine, Cesium hydride, Chlorine, Cobalt powder, Copper carbide, Copper, Copper salts, Cuprous acetylide, Fluorine, Halogens, Mercuric nitrate, Mercury, Mercury salts, Nitric acid, Oxidizing materials, Oxygen, Potassium, Potassium hydroxide, Rubidium hydride, Silver, Silver salts, Sodium hydride, Trifluoromethyl hypofluorite.
Ammonia (anhydrous)	<b>HAZARDS &amp; STORAGE:</b> Corrosive. Flammable. Separate from other chemicals, particularly oxidizing materials, acids, and halogens. <b>INCOMPATIBILITIES:</b> Acids, Bromine, Calcium hypochlorite, Chlorine, Halogens, Hydrogen fluoride (Hydrofluoric acid), Iodine, Mercury, Oxidizing gases.
Ammonium hydroxide	<b>HAZARDS &amp; STORAGE:</b> Store in a cool and well ventilated area away from combustibles <b>INCOMPATIBILITIES:</b> Acids, Acrolein, Acrylic acid, Chlorosulfonic acid, Dimethyl sulfate, Halogens, Hydrogen chloride (Hydrochloric acid), Hydrogen fluoride (Hydrofluoric acid), Nitric acid, Nitromethane, Oleum, B-Propiolactone, Propylene oxide, Silver nitrate, Silver oxide, Silver permanganate, Sulfuric acid.
Ammonium Nitrate	<b>HAZARDS &amp; STORAGE:</b> Strong oxidizer. Combustion by products include oxides of nitrogen and ammonia. If subjected to strong shocks or heated under confinement causing a pressure buildup, may undergo detonation. A relatively stable explosive that has caused many industrial explosions. Separate from acids, alkalis, reducing agents, and combustible materials. Do not store above 130 °F. <b>INCOMPATIBILITIES:</b> Acetic acid, Acetic anhydride + nitric acid, Acids, Alkali metals, Aluminum powder, Aluminum chloride, Ammonia, Ammonium chloride, Ammonium dichromate, Antimony powder, Barium chloride, Barium nitrate, Bismuth powder, Brass powder, Cadmium powder, Calcium powder, Calcium chloride, Charcoal, Chlorates, Chloride salts, Chromium powder, Chromium (VI) salts, Cobalt powder, Copper powder, Cyanoguanidine, Fertilizers, Flammable liquids, Hydrocarbon oils, Iron Powder, Iron(II) sulfide, Iron(III) chloride, Lead powder, Magnesium powder, Manganese powder, Metal powders, NaOCl, Nickel powder, Nonmetals, Oils, Organic fuels, Organic matter, Phosphorus, Potassium powder, Potassium chromate, Potassium dichromate, Potassium nitrate, Potassium permanganate, Reducing materials, Sawdust, Sodium, Sodium chloride, Sodium perchlorate, Stainless steel powder, Stearates, Sugar, Sulfur, Tin powder, Titanium powder, Trinitroanisole, Urea, Water (hot), Wax, Zinc powder.

Chemical	Chemical Hazard and Compatibility Information
Aniline	<p><b>HAZARDS &amp; STORAGE:</b> Serious health hazard. Combustible liquid. Store in a cool, dry, well ventilated location away from fire hazards and reactive materials.</p> <p><b>INCOMPATIBILITIES:</b> Acetic anhydride, Acids, alkalis, Anilinium chloride, Benzenediazonium-2-carboxylate, Boron trichloride, 1-Chloro-2,3-epoxypropane, Chlorosulfonic acid, Dibenzoyl peroxide, Diisopropyl peroxydicarbonate, Fluorine, Fluorine nitrate, F<sub>3</sub>Cl, n-Haloimides, Hexachloromelamine, Hydrogen peroxide, Nitromethane, Nitrosyl perchlorate, Oleum, Oxidizers, Ozone, Perchloric acid, Perchloryl fluoride, Perchromates, Peroxodisulfuric acid, Peroxomonosulfuric acid, Peroxydisulfuric acid, Peroxyformic acid, Potassium peroxide, B-Propiolactone, Nitric acid (red fuming), Silver perchlorate, Sodium peroxide, Sulfuric acid, Tetranitromethane, Trichloromelamine, Trichloronitromethane (145°C).</p>
Arsenic	<p><b>HAZARDS &amp; STORAGE:</b> Store at ambient temperatures.</p> <p><b>INCOMPATIBILITIES:</b> Acid or acid fumes, Bromates, Bromine azide, Bromine pentafluoride, Bromine trifluoride, Chlorates, Chlorine monoxide, Chlorine trifluoride, Chromium trioxide, CsC<sub>3</sub>BCH, Dirubidium acetylide, Halogens, Hexafluoroisopropylideneamino lithium, Iodates, Iodine pentafluoride, Lithium, Nitrogen trichloride, NOCl, Oxidizing materials, Palladium, Peroxides, Platinum, Potassium nitrate, Potassium permanganate, RbC<sub>3</sub>BCH, Reducing Agents, Rubidium carbide, Silver nitrate, Sodium peroxide, Zinc.</p>
Azides	<p><b>HAZARDS &amp; STORAGE:</b> Store in a cool, dry place.</p> <p><b>INCOMPATIBILITIES:</b> Acids (strong) Carbon disulfide, Metal salts.</p>
Benzene	<p><b>HAZARDS &amp; STORAGE:</b> Flammable and combustible liquid. May accumulate static electricity. A carcinogen and a serious health hazard. Store in flammable liquids storage room or cabinet. Separate from oxidizing materials.</p> <p><b>INCOMPATIBILITIES:</b> Bromine pentafluoride, Bromine trifluoride, Chlorine, Chromium trioxide, Dioxygen difluoride, Dioxygenyl tetrafluoroborate, Iodine heptafluoride, Iodine pentafluoride, NC<sub>10</sub>, Nitric acid, Nitryl perchlorate, Oxidizing materials, Oxygen (liquid), Ozone, Perchlorates, Permanganic acid, Peroxodisulfuric acid, Peroxomonosulfuric acid, Potassium dioxide, Silver perchlorate, Sodium peroxide, Oxidizers (strong), Uranium hexafluoride.</p>
Bromine	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive and fuming liquid. Strong oxidizer. Separate from oxidizing materials.</p> <p><b>INCOMPATIBILITIES:</b> Acetaldehyde, Acetylides, Acrylonitrile, Alcohols, Aldehydes, Aluminum, Ammonia, Antimony, Azides (metal, particularly silver azide or sodium azide), Boron, Calcium nitride, Carbonyl compounds, Carboxylic acids, Cesium carbide, Cesium oxide, ClF<sub>3</sub>C<sub>2</sub>, Copper acetylides, Copper hydride, Cs<sub>2</sub>H, Diethyl ether, Diethylzinc, Dimethylformamide, Disilane, Ethyl phosphine, Ethylene, Fluorine, Germane, Germanium, Hydrogen, Iron carbide, Isobutyrophenone, Ketones, Lithium, Li<sub>2</sub>Si<sub>2</sub>, Lithium carbide, Mercury, Methanol, Mg<sub>2</sub>P<sub>2</sub>, Na<sub>2</sub>C<sub>2</sub>, NaC<sub>2</sub>H, Nickel carbonyl, Nitrogen triiodide, Olefins, Organics (combustible) Oxidizable materials, Oxygen difluoride, Ozone, Phosphine, Phosphorous, Potassium, POX, Praseodymium, Rubber (natural), Rubidium carbide, Silane and homologs, Sodium, Sr<sub>3</sub>P, Tetrahydrofuran, Titanium, Trialkyl boranes, Trimethylamine, Uranium dicarbide, Water or steam, Zirconium dicarbide.</p>
Calcium Oxide	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive. Reacts with water releasing heat and forming alkaline solution. Reacts with acids.</p> <p><b>INCOMPATIBILITIES:</b> Bromine trifluoride, Chlorine trifluoride, Ethanol, Fluorine, Hydrogen fluoride (Hydrofluoric acid) liquid, Interhalogens, Phosphorus pentoxide, Water.</p>
Carbon	<p><b>HAZARDS &amp; STORAGE:</b> Store in a cool, dry place.</p> <p><b>INCOMPATIBILITIES:</b> Ammonium nitrate + heat, Ammonium perchlorate, Bromates, Calcium hypochlorite, Chlorates, Chlorine oxide, Halogens, Interhalogens, Iodates, Iodine pentoxide, Lead nitrate, Mercury nitrate, Nitric acid, Oxidants, Oxides, Oxosalts, Oxygen, Peroxides, Sodium sulfide, Unsaturated oils, Zinc nitrate.</p>
Carbon Tetrachloride	<p><b>HAZARDS &amp; STORAGE:</b> Carcinogen. Keep in tightly closed container. Liquid will attack some plastics, coatings and rubber. Appropriate containers include glass, cans, and drums made of metal which are not susceptible to hydrochloric acid.</p> <p><b>INCOMPATIBILITIES:</b> Al(C<sub>2</sub>H<sub>5</sub>)<sub>3</sub>, Alkali metals, Allyl alcohol, Aluminum, Aluminum + methanol, Aluminum trichloride, Barium, Beryllium, Boranes, Bromine trifluoride, Calcium disilicide, Calcium hypochlorite, Chlorine trifluoride, Decaborane(14), Dibenzoyl peroxide, Diborane, Dimethyl formamide, Dimethylacetamide, Dinitrogen tetroxide, Disilane, Ethylene, Fluorine, 1,2,3,4,5,6-Hexachlorocyclohexane, Lithium, Magnesium, Metals (chemically active), Oxygen (liquid), Plutonium, Potassium, Potassium-sodium alloy, Potassium-tert-butoxide, Sodium, Tetraethylaluminum, Tetraethylenepentamine, Tetrasilane, Triethylaluminum trichloride, Trisilane, Uranium, Zinc, Zirconium.</p>
Chlorates	<p><b>HAZARDS &amp; STORAGE:</b> Store in a cool, dry place.</p> <p><b>INCOMPATIBILITIES:</b> Ammonium nitrate, Ammonium salts, acids, metal powders, sulfur, finely divided organic or combustible substances.</p>

Chemical	Chemical Hazard and Compatibility Information
Chlorine	<p><b>HAZARDS &amp; STORAGE:</b> Severe health hazard. Corrosive gas that may be shipped as a liquid. Strong oxidizer. Most combustibles will burn in chlorine as they do in oxygen.</p> <p><b>INCOMPATIBILITIES:</b> N-aryl sulfamides, Acetaldehyde, Acetylides (metal), Air, Alcohols, Alkylisothioureasalts, Alkylthiuronium salts, Amidosulfuric acid, Ammonia, Ammonium chloride solutions (acid), Antimony powder, Arsenic, Arsenic disulfide, Arsine, As<sub>2</sub>(CH<sub>3</sub>)<sub>4</sub>, Aziridine, Ba<sub>3</sub>P<sub>2</sub>, Benzene, Bismuth, Biuret, Boron, Boron trisulfide, BPI<sub>2</sub>, Brass, Bromine pentafluoride, tert-Butanol, C<sub>2</sub>H<sub>5</sub>PH<sub>2</sub>, Calcium powder, Ca<sub>3</sub>P<sub>2</sub>, Ca(ClO<sub>2</sub>)<sub>2</sub>, Calcium nitride, Carbides (metal), Carbon, Carbon disulfide, Cesium, Cesium acetylide, Cesium oxide, 3-Chloropropyne, Co<sub>2</sub>O, Combustible substances, Copper, Copper hydride, Copper(II) phosphide, Cyanuric acid, Diborane, Dibutyl phthalate, Dichloro(methyl)arsine, Diethyl ether, Diethyl zinc, Dimethyl formamide, Dimethyl phosphoramidate, bis(2,4- Dinitrophenyl)disulfide, Dioxygen difluoride, Disilyl oxide, 4,4'-Dithiodimorpholine, Ethylene, Ethylene imine, Fluorine, Gasoline, Germanium, Glycerol, H<sub>2</sub>SiO, Hexachlorodisilane, Hg<sub>3</sub>P<sub>2</sub>, Hydrazine, Hydrides, Hydrocarbon oils or waxes, Hydrogen, Hydrogen chloride (Hydrochloric acid), Hydroxylamine, Illuminating gas, Iron, Manganese, Mercuric oxide, Mercuric sulfide, Mercury, Metals, Methane, Methanol, Mn<sub>3</sub>P<sub>2</sub>, Niobium, Nitrogen triiodide, Nonmetals, Oxygen, Oxygen difluoride, P<sub>2</sub>O<sub>3</sub>, P(SNC)<sub>3</sub>, PCBs, Phenyl magnesium bromide, Phosphides (metal), Phosphine, Phosphines (alkyl), Phosphorus, Phosphorus compounds, Polychlorobiphenyl, Polydimethyl siloxane, Polyisobutylene, Polymethyl trifluoropropylsiloxane, Polypropylene, Potassium, Potassium acetylide, Potassium hydride, Propane, Rubber, Rubidium, Rubidium acetylide, SbH<sub>3</sub>, SiH<sub>2</sub>, Silane, Silicon, Silicones, Silver oxide, SnF<sub>2</sub>, Sodium, Sodium acetylide, Sodium carbide, Sodium hydride, Sodium hydroxide, Sr<sub>3</sub>P, Steel, Stibine, Sulfamic acid, Sulfides, Tellurium, Tetraselenium tetranitride, Thorium, Tin, Trialkyl boranes, Trimethyl thionophosphate, Tungsten dioxide, Turpentine, Uranium, Uranium dicarbide, Vanadium, Vanadium powder, WO<sub>2</sub>, Zinc, Zn(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>, Zirconium dicarbide.</p>
Chlorine Dioxide	<p><b>HAZARDS &amp; STORAGE:</b> A powerful oxidizer. A powerful explosive. It is sensitive to spark, impact, strong light, or rapid heating. Concentrations of 10% or higher in air are explosive.</p> <p><b>INCOMPATIBILITIES:</b> Ammonia, Butadiene, Carbon monoxide, Combustible substances, Difluoramine, Ethane, Ethylene, Fluoramines, Fluorine, Hydrocarbons, Hydrogen, Hydrogen Sulfide, Mercury, Methane, NHF<sub>2</sub>, Nonmetals, Phosphorus, Phosphine, Potassium hydroxide, Propane, Sugar, Sulfur, Trifluoramine, Water or steam.</p>
Chloroacetic Acid	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive and combustible solid. Separate from alkalis, alcohols, oxidizing materials, reducing agents, and metals.</p> <p><b>INCOMPATIBILITIES:</b> Alkalis, alcohols, metals, oxidizing materials, reducing agents.</p>
Chloroform	<p><b>HAZARDS &amp; STORAGE:</b> Serious health hazard. Separate from strong alkalis and strong mineral acids.</p> <p><b>INCOMPATIBILITIES:</b> Alkali (strong), Aluminum, Chemically active metals, Dinitrogen tetraoxide, Disilane, Fluorine, Lithium, Magnesium, Magnesium powder, Metals, Nitrogen tetroxide, Potassium, Potassium-tert-butoxide, Sodium, Sodium hydride, Sodium methylate, Sodium-potassium alloy, Triisopropylphosphine.</p>
Chromic Acid	<p><b>HAZARDS &amp; STORAGE:</b> A powerful oxidizer. A storage hazard; it may burst a sealed container due to carbon dioxide release. Separate from combustible materials, halogens, sulfides, and metals.</p> <p><b>INCOMPATIBILITIES:</b> Acetic Acid, Acetone, Alcohols, Aluminum, Organic materials, Oxidizable materials, Sulfur.</p>
Chromium trioxide	<p><b>HAZARDS &amp; STORAGE:</b> A powerful oxidizer.</p> <p><b>INCOMPATIBILITIES:</b> Acetaldehyde, Acetone, Acetylene, Alcohols, Alkali metals, Aluminum, Ammonia, Arsenic, Benzaldehyde, Benzene, Benzylthylaniline, Bromine pentafluoride, Butanol, Butyraldehyde, Butyric acid, Chlorine trifluoride, Chromium(II) sulfide, Cyclohexanol, Diethyl ether, Dimethyl formamide, 1,3-Dimethylhexahydropyrimidone, Ethanol, Ethylacetate, Ethylene glycol, Glycerol, Hexamethylphosphoramide, Isopropylacetate, Methanol, Methyl dioxane, N,N-dimethylformamide, Organic materials or solvents, Oxidizable materials, Pelargonic acid, Pentyl acetate, Peroxyformic acid, Potassium, Potassium hexacyanoferrate, 2-Propanol, Propionaldehyde, Pyridine, Selenium, Sodium, Sodium amide, Sulfur.</p>
Copper	<p><b>HAZARDS &amp; STORAGE:</b></p> <p><b>INCOMPATIBILITIES:</b> 1-bromo-2-propyne, Acetylene, Hydrogen peroxide.</p>
Cumene hydroperoxide	<p><b>HAZARDS &amp; STORAGE:</b> Protect against physical damage</p> <p><b>INCOMPATIBILITIES:</b> Accelerators, Acids (organic or inorganic), Oxidizables, Organics, Flammable materials.</p>
Dimethyl Sulfoxide	<p><b>HAZARDS &amp; STORAGE:</b> Store in airtight container (not plastic) and protect from moisture and light.</p> <p><b>INCOMPATIBILITIES:</b> Acetyl chloride, Aluminum perchlorate, Benzenesulfonyl chloride, Borane, Boron compounds, Bromobenzoyl acetanilide, Bromoform, Carbonyl diisothiocyanate, Cyanuric chloride, Dinitrogen tetroxide, Disulfur dichloride, Halides, Hexachlorocyclotriphosphazine, Iodine pentafluoride, Iron(III) nitrate, Magnesium perchlorate, Metal alkoxides, Metal oxosalts, Metal salts of oxoacids, NiO<sub>4</sub>, Nonanhydronaborate(2-) ion, Oxidizing materials, P<sub>2</sub>O<sub>3</sub>, Perchloric acid, Periodic acid, Phosphorous</p>

Chemical	Chemical Hazard and Compatibility Information
	trichloride, Phosphoryl chloride, Potassium tert-butoxide, Silver difluoride, Silver fluoride, Sodium hydride, Sodium isopropoxide, Sodium perchlorate, Sulfur dichloride, Sulfur trioxide, Tetrachlorosilane, Thionyl chloride, Trifluoroacetic acid anhydride.
Ethyl Acetate	<b>HAZARDS &amp; STORAGE:</b> Keep tightly closed in a cool place and away from fire. <b>INCOMPATIBILITIES:</b> Acids, Alkalies, Chlorosulfonic acid, Lithium tetrahydroaluminate, Nitrates, Oleum, Oxidizing Materials, Potassium tert-butoxide.
Ethyl Alcohol	<b>HAZARDS &amp; STORAGE:</b> Keep in tightly closed containers. Metal containers used for the transfer of 5 gallons or more of ethanol need to be grounded and bonded. Only non-sparking equipment and tools are to be utilized, especially when opening and closing containers of ethanol. All precautions against static electricity should be taken. <b>INCOMPATIBILITIES:</b> Acetyl bromide, Acetyl chloride: incompatible, Bromine pentafluoride, Calcium hypochlorite, Chlorates, Chlorine trioxide, Chromium hypochlorite, Chromium trioxide, Cyanuric acid, Disulfuryl difluoride, HMnO <sub>4</sub> , Hydrogen peroxide, KO <sub>2</sub> , KOC(CH <sub>3</sub> ) <sub>3</sub> , Magnesium perchlorate, Manganese perchlorate, 2-dimethoxy propane, Mercuric nitrate, NaH <sub>3</sub> N <sub>2</sub> , Nitrates, Nitric acid, Oxidizers, Oxidizing materials, Perchlorates, Perchloric acid, Permanganates, Peroxides, Phosphorous(III) oxide, Potassium metal (oxidized coating), Silver perchlorate, Sodium, Tetrachlorosilane, UO <sub>2</sub> (ClO <sub>4</sub> ) <sub>2</sub> .
Ethyl Ether	<b>HAZARDS &amp; STORAGE:</b> Peroxide formation is likely to occur when ever containers have been opened and remain in storage for more than six months. Ethyl ether is not corrosive or dangerously reactive. It is a storage hazard. It readily forms explosive polymeric 1-oxyperoxides on exposure to air, sometimes leading to explosive residues when distilled. Store in a flammable storage cabinet. <b>INCOMPATIBILITIES:</b> Acetyl peroxide, Air, Boron triazide, Bromine, Bromine pentafluoride, Bromine trifluoride, Bromoazide, Chlorine, Chlorine trifluoride, Chromium oxide, Chromium oxychloride, Chromium trioxide, Chromyl chloride, Fluorine nitrate, Halogens, Hydrogen peroxide, Interhalogens, Iodine heptafluoride, Iodine(VII) oxide, LiAlH <sub>2</sub> , Nitric acid, Nitrosyl perchlorate, Nitryl chloride, Nitryl perchlorate, NOClO <sub>4</sub> , Oxidants, Oxygen, Ozone, Perchloric acid, Permanganic acid, Peroxodisulfuric acid, Potassium peroxide, Silver perchlorate, Sodium peroxide, Sulfanoyl chloride, Sulfuric Acid, Sulfur and sulfur compounds, Triethylaluminum, Trimethylaluminum, Uranyl nitrate.
Flammable liquids	<b>HAZARDS &amp; STORAGE:</b> Store in a flammable storage cabinet. <b>INCOMPATIBILITIES:</b> Ammonium nitrate, Chromic acid, halogens, Hydrogen peroxide, Nitric acid, Sodium peroxide.
Fluorine	<b>HAZARDS &amp; STORAGE:</b> Severe health hazard. Corrosive gas. Very strong oxidizer. Water reactive. Reacts violently with many chemicals. Reacts with every known element except helium, neon, and argon. Reacts with all materials except for some Teflons and some metals at low temperatures. Isolate from all other storage. <b>INCOMPATIBILITIES:</b> Acetaldehyde, Acetone, Acetonitrile, Acetylene, Alkali metal oxides, Alkali metals, Alkaline earth oxides, Alkaline earths, (peroxides)Alkene, Alkyl benzenes, Aluminum, Ammonia, Aniline, Anthracene, Antimony, Antimony trisulfide, Arsenic, Arsenic trioxide, Asbestos, Barium sulfide, Benzene, Benzoic acid, Boron, Boron nitride, Boron trichloride, Bromine, Calcium disilicide, Calcium iodide, Carbon disulfide, Carbon disulfide vapor, Carbon monoxide, Carbon tetrachloride, Ceramic materials, Cesium acetylide, Cesium heptafluoropropoxide, Charcoal, Chlorine, Chlorine dioxide, Chlorine fluoride, Chloroform, Chromium hypochlorite, Chromium(II) sulfide, Chromyl chloride, Coke, Copper hydride, Cyanamide, Cyanides, Cyanoguanidine, 1,2-Dichlorotetrafluoroethane, Dicyanogen, Dimethylamine, Dinitrogen tetroxide, Ditungsten carbide, Ethanol, Ethyl acetate, 1- or 2-Fluoriminoperfluoropropane, Gallic acid, Glass, Graphite, Halides (covalent), Halocarbons, Halogen acids, Halogens, Hydrazine, Hydrocarbons, Hydrogen, Hydrogen bromid (Hydrobromic acid), Hydrogen chloride (Hydrochloric acid), Hydrogen-containing molecules, Hydrogen fluoride (Hydrofluoric acid), Hydrogen halide gases or concentrated solutions, Hydrogen iodide, Hydrogen sulfide, Ice, Iodine, Iodoform, Lactic acid, Lead hexacyanoferrate(III), Lead iodide, Lithium acetylide, Lithium hexasilicide, Mercury iodide, Metal acetylides and carbides, Metal borides, Metal cyano complexes, Metal hydrides, Metal iodides, Metal oxides, Metal salts, Metal silicides, Metals, Methane, Methanol, Methyl borate, 3-Methyl butanol, Molybdenum sulfide, Monocesium acetylide, Natural gas, Neoprene, Nickel(II) oxide, Nickel(III) oxide, Nickel(IV) oxide, Nitric acid, Nitrogen oxide, Nitrogenous bases, Nonmetal oxides, Nonmetals, Nylons, Organic vapors, Oxides of sulfur, nitrogen, phosphorus, Oxidizable substances, Oxygen, Oxygenated organic compounds, Perchloric acid, Perfluorocyclobutane, Perfluoropropionyl fluoride, Phosphorus (yellow or red), Phosphorus pentachloride, Phosphorus trichloride, Phosphorus trifluoride, Polyacrylonitrile-butadiene, Polyamides (nylons), Polychloropene (neoprene), Polyethylene, Polymethyl methacrylate (Perspex), Polytetrafluoroethylene (Teflon), Polytrifluoropropylmethylsiloxane, Polyurethane foam, Polyvinyl chloride acetate, Polyvinylchloride-vinyl

Chemical	Chemical Hazard and Compatibility Information
	acetate (Tygon), Polyvinylidene fluoride-hexafluoropropylene (Viton), Potassium chlorate, perchlorate gas, Potassium hexacyanoferrate(II), Potassium hexacyanoferrate(III), Potassium hydride, Potassium hydroxide, Potassium iodide, Potassium nitrate, Potassium sulfide, Pyridine, Rubidium acetylide, Salicylic acid, Selenium, Seleninyl fluoride, Silicates, Silicides, Silicon carbon, Silicon tetrachloride, Silicon-containing compounds, Silver cyanide, Silver difluoride, Silver(I) oxide, Sodium acetate, Sodium bromate, Sodium dicyanamides, Sodium hydride, Stainless steel, Sulfides, Sulfur, Sulfur dioxide, Teflon, Tellurium, Trichloroacetaldehyde, Trinitromethane, Tungsten carbide, Turpentine, Uranium dicarbide, Water or steam, Zinc sulfide, Zirconium dicarbide, Thallium, Tin, Trichloroacetaldehyde, Trinitromethane, Tungsten carbide, Turpentine, Uranium dicarbide, Water or steam, Zinc sulfide, Zirconium dicarbide.
Formaldehyde	<b>HAZARDS &amp; STORAGE:</b> Carcinogen. Flammable gas or combustible solutions. Corrosive. Separate from oxidizing materials, alkalis, acids and amines. <b>INCOMPATIBILITIES:</b> Acids, Alkalies, Hydrogen peroxide, Magnesium carbonate, Nitromethane, Oxides of nitrogen, Oxidizers, Performic acid, Phenols, Urea.
Formic Acid	<b>HAZARDS &amp; STORAGE:</b> Corrosive and combustible liquid. Reacts with oxidizing materials. Formic acid decomposes slowly during storage forming carbon monoxide. Separate from oxidizing materials and alkaline substances. <b>INCOMPATIBILITIES:</b> Alkalies, Caustics (strong), <b>Chromic Acid</b> , Furfuryl alcohol, Hydrogen peroxide, <b>Nitric Acid</b> , Nitromethane, Oxidizing materials, Peroxides, P <sub>2</sub> O <sub>5</sub> , <b>Sulfuric Acid (conc.)</b> , Thallium nitrate.
Glycerol	<b>HAZARDS &amp; STORAGE:</b> Glycerin should be kept cool and dry. Glycerin is hygroscopic and may also absorb hydrogen sulfide, hydrogen cyanide, and sulfur dioxide. <b>INCOMPATIBILITIES:</b> Acetic anhydride, Calcium hypochlorite, Chlorine, Chromium trioxide, Hydrogen peroxide, Phosphorus triiodide, Potassium chlorate, Potassium permanganate, Potassium peroxide, Silver perchlorate, Sodium hydride, Sodium peroxide.
Hydrazine & it's Salts	<b>HAZARDS &amp; STORAGE:</b> Corrosive and flammable liquid. Rocket fuel. Air or oxygen is not required for decomposition, Thermally unstable. Decomposes at room temperature or above depending on surface contacted. A sensitive and powerful explosive. A powerful reducing agent. Inside storage should be in a standard flammable liquids room or cabinet. Separate from acids, oxidizing materials, metal oxides. Normally stored under nitrogen. <b>INCOMPATIBILITIES:</b> Acids (strong), Air, Alkali metals, Ammonia, Asbestos, Barium oxide, Benzene-seleninic acid, Benzene-seleninic anhydride, Cadmium perchlorate, Calcium oxide, Carbon dioxide + stainless steel, Catalysts, Chlorates, Chlorine, 1-Chloro-2,4-dinitrobenzene, 2-Chloro-5-methylnitrobenzene, Chromate salts, Chromates, Chromium dioxide, Cloth, Copper chlorate, Copper oxide, Copper oxide (black), Copper(II) salts, Copper-iron oxide, Dicyanofurazin, Diethyl zinc, Dinitrogen oxide, Dinitrogen tetroxide, Earth, Fluorine, N-haloimides, Hydrogen peroxide, Iridium, Iron oxide, Iron rust, Lead oxide, Lithium perchlorate, Manganese nitrate, Mercury oxide, Mercury(I) chloride, Mercury(I) nitrate, Mercury(II) chloride, Mercury(II) nitrate, Metal catalysts, Metal salts, Metallic oxides, Molybdenum, Molybdenum oxides, Nitrous oxide, Nickel, Nickel perchlorate, Nitric acid, Nitric oxide, Oxidants, Oxygen, Oxygen (liquid), Peroxides, Platinum black, Porous materials, Potassium, Potassium dichromate, Potassium peroxodisulfate, Ruthenium(III) chloride, Silver compounds, Sodium, Sodium dichromate, Sodium hydroxide, Sodium perchlorate, N,2,4,6-Tetranitroaniline, Tetryl, Thiocarbonyl azide thiocyanate, Tin(II) chloride, Titanium compounds, Trioxxygen difluoride, Wood, Zinc diamide.
Hydriodic Acid	<b>HAZARDS &amp; STORAGE:</b> Corrosive. Explodes on contact with ethyl hydroperoxide. Reacts with water or steam to produce toxic and corrosive fumes. <b>INCOMPATIBILITIES:</b> Alkaaliies, Amines, Dinitrogen Trioxide, Dinitrogen tetraoxide, Ethyl hydroperoxide, Fluorine, Magnesium, Metals, <b>Nitric acid</b> , Oxidants, Ozone, <b>Perchloric acid</b> , Phosphorus, Potassium, Potassium chlorate.
Hydrobromic Acid (Hydrogen Bromide)	<b>HAZARDS &amp; STORAGE:</b> Corrosive gas in solution. Separate from alkalies, oxidizing materials, amines, halogens, and metals. Acid solutions slowly darken when exposed to air and light. <b>INCOMPATIBILITIES:</b> Alkaline materials, Amines, Ammonia, Brass, Caustics (strong), Copper, Fe <sub>2</sub> O <sub>3</sub> , Fluorine, Halogens, Metals, Moisture, Oxidizers, Ozone, Steel, Zinc.
Hydrochloric Acid (Hydrogen Chloride)	<b>HAZARDS &amp; STORAGE:</b> Corrosive. Separate from oxidizing materials, organic materials, and alkalies. <b>INCOMPATIBILITIES:</b> Alkali or active metals, Aluminum, Aluminum-titanium alloys, Cesium acetylide, 1,1-Difluoroethylene, Fluorine, Hexalithium disilicide, Metal acetylides, Metal carbides, <b>Perchloric Acid</b> , Potassium Permanganate, Rubidium acetylide, Silicon dioxide, Sodium, <b>Sulfuric acid</b> , Tetraselenium tetranitride.
Hydrofluoric Acid (Hydrogen Fluoride)	<b>HAZARDS &amp; STORAGE:</b> Highly Acute Toxin. Severe health hazard. Corrosive. Burns can be lethal. HF reacts with the calcium in the body to form calcium fluoride (CaF <sub>2</sub> ), an insoluble salt. The reaction may reduce the

Chemical	Chemical Hazard and Compatibility Information
	<p>level of calcium ions in the body to a dangerous level very rapidly causing death. HF burn kit is recommended at the location where this chemical is stored and used. Store in a secure location. Storage and work areas must be posted "Designated Area, Highly Acute Toxin". Separate from silica, incompatible metals, concrete, glass, ceramics, and oxidizing materials. Do not put even dilute solutions in glass containers. Do not store in ceramic or metal containers.</p> <p><b>INCOMPATIBILITIES:</b> <b>Acetic Acid</b>, Acetic anhydride, 2-Amino ethanol, Ammonium hydroxide, Arsenic trioxide, <b>Bismuthic acid</b>, Calcium oxide, <b>Chlorosulfonic acid</b>, Concrete, Cyanogen fluoride, Ethylene diamine, Ethylene imine, Fluorine, HBiO<sub>3</sub>, Mercuric oxide, <b>Methanesulfonic acid</b>, <b>Nitric Acid</b>, Oleum, Oxides, <b>Perchloric Acid</b>, n-Phenylazopiperidine, P<sub>2</sub>O<sub>5</sub>, Potassium permanganate, Potassium tetrafluorosilicate (2-), R-Propiolactone, Propylene oxide, Sodium, Sodium hydroxide, Sodium tetrafluorosilicate, <b>Sulfuric acid</b>, Vinyl acetate: violent reaction, Water or steam.</p>
Hydrogen Cyanide (Hydrocyanic acid, Prussic Acid)	<p><b>HAZARDS &amp; STORAGE:</b> A deadly human poison by all routes. HCN can polymerize explosively at 50-60 °C in the presence of traces of alkali. The anhydrous liquid is stabilized at or below room temperature by the addition of acid. Because of its low flashpoint and wide range of explosive mixtures, HCN presents a serious fire and explosion hazard. Amines, hydroxides, and cyanide salts that are capable of producing the cyanide ion should not be added to liquid HCN without suitable precautions. Once started, the polymerization is likely to become violent and be accompanied by sharp increases in temperature and pressure. Commercial HCN is normally stabilized by the addition of a little phosphoric acid, sulfuric acid or sulfur dioxide. Distilled HCN constitutes a greater explosion hazard than stabilized materials, so use of the distilled materials should be avoided. Shelf life not to exceed 90 days or as otherwise specified by the manufacturer.</p> <p><b>INCOMPATIBILITIES:</b> Acetaldehyde, <b>Acids or acid fumes</b>, Air, Amines, Bases, Caustics, Water or Steam. When heated to decomposition, it forms highly toxic CN- gas.</p>
Hydrogen Peroxide	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive. Strong oxidizer. H<sub>2</sub>O<sub>2</sub> is a powerful oxidizer in the concentrated state. It is important to keep containers of this material covered. Uncovered containers are much more prone to react with flammable vapors, gases, etc. Uncovered, the water form an H<sub>2</sub>O<sub>2</sub> solution can evaporate, concentrating the material and increasing the fire hazard of the remainder. When stored in sealed containers, gradual decomposition of H<sub>2</sub>O<sub>2</sub> to H<sub>2</sub>O + O can cause large pressures to build up. There is a severe explosion hazard when highly concentrated or when pure H<sub>2</sub>O<sub>2</sub> is exposed to heat, mechanical impact, or is caused to decompose catalytically by catalytic metals. Separate from alkalis, oxidizable materials, finely divided metals, alcohols, and permanganates.</p> <p><b>INCOMPATIBILITIES:</b> Acetic acid, Acetic anhydride, Acetone, Alcohols, Ammonia, Aniline, Antimony trisulfide, Arsenic trisulfide, Benzenesulfonic anhydride, Brass, Bronze, 2-Butanone, Calcium permanganate, Carboxylic acids, Cellulose, Charcoal, Chromium, Coal, Cobalt oxide, Copper, Copper sulfide, Cyclohexanone, Cyclopentanone, Diethyl ether, uns-Dimethylhydrazine, 1,1-Dimethylhydrazine, Dimethylphenylphosphine, Diphenyl diselenide, Ethanol, Ethyl acetate, Formic acid, Furfuryl alcohol, Gadolinium hydroxide, Glycerol, Hydrazine, Hydrazine hydrate, Hydrogen selenide, Iron oxide, Iron powder, Iron sulfide, Ketene, Lead, Lead dioxide, Lead hydroxide, Lead monoxide, Lead oxide, Lead sulfide, Lithium, Lithium tetrahydroaluminate, Magnesium powder, Manganese, Manganese dioxide, Manganese oxide, Mercuric oxide, Mercurous oxide, Metals, Metal oxides, Metal powders, Metal salts, 3-Methylcyclohexanone, Molybdenum disulfide, NaIO<sub>3</sub>, Nickel oxide, Nitric acid, Nitrogenous bases, Organic compounds, Organic matter, Oxidizable materials, P<sub>2</sub>O<sub>5</sub>, 3-Pentanone, 2-Phenyl- 1,1-dimethylethanol, a-Phenylselenoketones, Phosphorus, Phosphorus(V) oxide, Potassium, Potassium permanganate, Quinoline, Selenium hydride, Silver, Sodium, Sulfuric acid, Tartaric acid, Tetrahydrothiophene, Thiodiglycol, Tin(II) chloride, Trioxane, Vinyl acetate, Water, Wood, Zinc.</p>
Hydrogen Sulfide	<p><b>HAZARDS &amp; STORAGE:</b> Severe health hazard. Flammable gas. Low ignition energy. Separate from oxidizing materials.</p> <p><b>INCOMPATIBILITIES:</b> Acetaldehyde, Barium peroxide, Bromine pentafluoride, 4-Bromobenzenediazonium chloride, Calcium oxide, Chlorine oxide, Chlorine trifluoride, Chromium trioxide, Copper, Copper chromate, Copper oxide, Dibismuth dichromium nonaoxide, Dichlorine oxide, Fluorine, Heptasilver nitrate octaoxide, Iron oxide (hydrated), Lead dioxide, Lead(II) hypochlorite, Manganese dioxide, Mercury oxide, Mercury(I) bromate, Metal powders, Metal oxides, Nickel oxide, Nitric acid, Nitrogen trifluoride, Nitrogen trifluoride, Nitrogen triiodide, Oxidants, Oxygen, Oxygen difluoride, Perchloryl fluoride, Phenyl diazonium chloride, Rust, Silver bromate, Silver fulminate, Silver(I) oxide, Silver(II) oxide, Sodium peroxide, Thallium(III) oxide, Tungsten.</p>
Hydrazoic Acid	<p><b>HAZARDS &amp; STORAGE:</b> Mildly toxic by inhalation. A severe irritant to skin eyes, and mucous membranes. A dangerously sensitive explosive hazard when shocked or exposed to heat.</p> <p><b>INCOMPATIBILITIES:</b> Cadmium, Copper, Fluorine, Nickel, <b>Nitric Acid</b>.</p>
Iodine	<p><b>HAZARDS &amp; STORAGE:</b> Iodine should be stored in tightly closed containers in a cool, dry environment away</p>

Chemical	Chemical Hazard and Compatibility Information
	<p>from sunlight.</p> <p><b>INCOMPATIBILITIES:</b> Acetaldehyde, Acetylene, Aluminum, Aluminum-titanium alloys, Ammonia, Antimony powder, Barium acetylide, Boron, Bromine pentafluoride, Bromine trifluoride, Calcium acetylide, Cesium acetylide, Cesium oxide, Chlorine, Chlorine trifluoride, Copper(I) acetylide, Dipropylmercury, Ethanol, Fluorine, Formamide, Hafnium powder, Halogens, Hydrogen, Interhalogens, Lithium, Lithium acetylide, Lithium carbide, Magnesium, Mercuric oxide, Metal acetylides, Metal carbides, Metals, Nonmetals, Oxygen, Oxygen difluoride, Phosphorus, Polyacetylene, Potassium, Pyridine, Reducing materials, Rubidium acetylide, Silver azide, Sodium, Sodium hydride, Sodium phosphinate, Strontium acetylide, Sulfides, Titanium, Trioxxygen difluoride, Zirconium acetylide, Zirconium carbide.</p>
Isopropyl Alcohol	<p><b>HAZARDS &amp; STORAGE:</b> Reacts with air to form dangerous peroxides. The presence of 2-butanone increases the reaction rate for peroxide formation. Hydrogen peroxide sharply reduces the autoignition temperature.</p> <p><b>INCOMPATIBILITIES:</b> Acids (strong), Air, Alkaline earth, Alkali metals, Aluminum, Aluminum triisopropoxide, Amines, Ammonia, Barium perchlorate, Caustics, Chromium trioxide, COC<sub>1</sub><sub>2</sub>, Crotonaldehyde, Dioxgenyl tetrafluoroborate, Hydrogen peroxide, Nitroform, Oleum, Oxidants (strong), Oxygen, Phosgene, Potassium tert-butoxide, Trinitromethane.</p>
Lead	<p><b>HAZARDS &amp; STORAGE:</b> Store in a cool, well-ventilated place, out of the direct rays of the sun, away from areas of high fire hazard</p> <p>Store lead away from oxidizers, chemically active metals, and acids.</p> <p><b>INCOMPATIBILITIES:</b> Acids, Ammonium nitrate, Chlorates, Chlorine trifluoride, Disodium acetylide, Hydrogen peroxide (conc.), Magnesium, Metals (active), Nitrates, Oxidants, Oxidizing materials, Perchlorates, Permanganates, Peroxides, Potassium, Sodium acetylide, Sodium, Sodium azide, Zinc, Zirconium.</p>
Lithium and its compounds	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive and flammable solid. Water reactive. Separate from water.</p> <p><b>INCOMPATIBILITIES:</b> Acetonitrile, Arsenic, Atmospheric gases, Beryllium, Bromine, Bromine pentafluoride, Bromobenzene, Bromoform, Carbides, Carbon dioxide, Carbon tetrabromide, Carbon tetrachloride, Carbon tetraiodide, CHI<sub>3</sub>, Chlorine, Chlorine tri- and pentafluorides, Chloroform, Chromium, Chromium trichloride, Chromium(III) oxide, Cobalt alloys, Diazomethane, Diborane, Dichlorormethane, Diiodomethane, Fluorotrichloromethane, Halocarbons, Halogens, Hydrogen, Iodine, Iron alloys, Iron sulfide, Iron(II) sulfide, Maleic anhydride, Manganese alloys, Manganese telluride, Mercury, Metal chlorides, Metal oxides, Molybdenum trioxide, Nickel alloys, Niobium pentoxide, Nitric acid, Nitrogen, Nitril fluoride, Nonmetal oxides, Organic matter, Oxygen, Phosphorus, Platinum, Rubber, Silicates, Sodium nitrite, Sulfur, Ta<sub>2</sub>O<sub>5</sub>, Tetrachloroethylene, Titanium dioxide, Trichloroethylene, 1,1,2-Trichloro-trifluoroethane, Trifluoromethylhypofluorite, Tungsten trioxide, Vanadium, Vanadium pentoxide, Viton [poly(l,l-difluoroethylene-hexafluoro-propylene)], Water, Zirconium tetrachloride.</p>
Magnesium	<p><b>HAZARDS &amp; STORAGE:</b> Fine powder, thin sheets, chips and turnings are easily ignited and burn with intense heat and brilliant white flame. Isolate from halogens, acids, and oxidizing materials.</p> <p><b>INCOMPATIBILITIES:</b> Acetylenic compounds, Ammonium nitrate, Ammonium salts, Beryllium fluoride, Beryllium oxide, Boron diiodophosphide, Bromine, Bromobenzyl trifluoride, Cadmium cyanide, Cadmium oxide, Calcium carbide, Carbon dioxide, Carbon tetrachloride, Carbonates, Chlorate salts, Chlorine, Chlorine trifluoride, Chloroform, Chloromethane, Copper cyanide, Copper oxide, 1,2-Dibromoethane, Dichlorodifluoromethane, Dinitrogen tetraoxide, Ethylene gas, Ethylene oxide, Fluorine, Fluorocarbon polymers, Halocarbons, Halogens, Hydrogen iodide, Hydrogen peroxide, Interhalogens, Iodine heptafluoride, Iodine vapor, Lead cyanide, Lead dioxide, Mercury cyanide, Mercury oxide, Metal cyanides, Metal nitrates, Metal oxosalts, Methanol, Molybdenum oxide, Nickel cyanide, Nitrates (fused), Nitric acid vapor, Nitrogen, Nitrogen dioxide, Oxidants, Oxygen (liquid), Performic acid, Phosphates, Polytetrafluoroethylene powder, Potassium carbonate, Potassium chlorate, Potassium chlorite, Silicon dioxide powder, Silver nitrate, Silver oxide, Sodium chlorate, Sodium iodate, Sodium nitrate, Sodium peroxide, Sulfates, Sulfur, Tellurium, Tin oxide, 1,1,1-Trichloroethane, Trichloroethylene, Water, Zinc cyanide, Zinc oxide.</p>
Mercury	<p><b>HAZARDS &amp; STORAGE:</b> Store in small quantities in polyethylene bottles. To prevent evaporation, cover surface with water. Keep containers closed. At ordinary temperatures mercury is slightly volatile. Ambient storage is recommended</p> <p><b>INCOMPATIBILITIES:</b> Acetylene, Acetylenic compounds, Aluminum, Ammonia, Ammonia gases, Azides, Boron diiodophosphide, BPI<sub>2</sub>, 3-Bromopropyne, Calcium, CHA, CH<sub>3</sub>N<sub>3</sub>, Chlorates, Chlorine, Chlorine dioxide, Ethylene oxide, Fulminic acid, Lithium, Metals, Methyl azide, Methylsilane, Na<sub>2</sub>C<sub>2</sub>, Nitrates, Nitromethane, Oxidants, Peroxyformic acid, Potassium, Rubidium, Sodium, Sodium acetylide, Tetracarbonylnickel.</p>
Methanol	<p><b>HAZARDS &amp; STORAGE:</b> Store in tightly closed containers. Metal containers involving the transfer of 5 gallons or more should be grounded and bonded. Methanol may accumulate static electrical charges which may cause ignition of its vapors.</p>

Chemical	Chemical Hazard and Compatibility Information
	<p><b>INCOMPATIBILITIES:</b> Acids (strong), Acetylene bromide, Alkyl aluminum salts, Aliphatic amines, Aluminum: incompatible, Barium perchlorate, Beryllium dihydride, Bromine, Caustics, Chlorine, Chloroform, Chromic anhydride, Chromium trioxide, Cyanuric chloride, Dichloromethane, Diethyl zinc, Hydrogen peroxide, Isocyanates, Lead perchlorate, Magnesium, Metals, Nitric acid, Oxidants, P<sub>2</sub>O<sub>3</sub>, Perchloric acid, Phosphorus trioxide, Potassium, Potassium tert-butoxide, Sodium hypochlorite, Zinc.</p>
Methyl Ethyl Ketone	<p><b>HAZARDS &amp; STORAGE:</b> Store in tightly closed containers. Metal containers involving the transfer of 5 gallons or more of methyl ethyl ketone should be grounded and bonded. Store containers in a cool, well-ventilated area away from heat, sparks, and flames. It forms an explosive mixture with air. Check intermittently for leakage, as it will dissolve or soften some plastics.</p> <p><b>INCOMPATIBILITIES:</b> Aliphatic amines, Chorosulfonic acid, Nitric acid, Oleum, Oxidizers (very strong), Potassium <i>tert</i>-butoxide, 2-Propanol, Sulfuric acid.</p>
Methylene Chloride	<p><b>HAZARDS &amp; STORAGE:</b> Severe health hazard. Carcinogen. Highly volatile. Will not form explosive mixtures with air at ordinary temperatures. Store in a ventilated cabinet or fume hood. Keep containers tightly closed.</p> <p><b>INCOMPATIBILITIES:</b> Caustics, Dinitrogen tetraoxide, Lithium, Magnesium powder, Metals (chemically active), Methanol vapors, Oxidizers (strong), Oxygen (high content atmospheres), Oxygen (liquid), Potassium, Potassium <i>tert</i>-butoxide, Sodium, Sodium-potassium alloy.</p>
Nitrates	<p><b>HAZARDS &amp; STORAGE:</b> Inorganic nitrates can give up oxygen to other materials, which may explode. Ammonium nitrate can self-detonate under certain conditions and is considered a high explosive. It is very insensitive to impact and difficult to detonate. Nitrates should be considered storage hazards.</p> <p><b>INCOMPATIBILITIES:</b> Aluminum, Boron phosphide, Cyanide, Esters, Phosphorus, PN<sub>2</sub>H, Reducing materials, Sodium cyanide, Sodium hypophosphite, Strontium chloride, Thiocyanates.</p>
Nitric Acid	<p><b>HAZARDS &amp; STORAGE:</b> Severe health hazard. Corrosive. Strong oxidizer. Fuming Nitric Acid is more corrosive and reactive. Due to its reactive nature, Nitric Acid should be stored in a separate secondary container, separated from all other acids and chemicals. Separate from alkalis, metals, organics, and other oxidizing materials. Do not store in polyethylene or polypropylene plastic containers.</p> <p><b>INCOMPATIBILITIES:</b> <b>Acetic acid</b>, Acetic anhydride, Acetone, 4-Acetoxy-3-methoxybenzaldehyde, 5-Acetylamine-3-bromobenzo(b)thiophene, Acetylene, Acetylene derivatives, Acrolein, Acrylonitrile, Alcohols, Aliphatic amines, Alkane thiols, o-Alkyl ethylene dithiophosphate, Allyl alcohol, Allyl chloride, 2-Aminoethanol, 2-Aminothiazole, Ammonia, Ammonium hydroxide, Ammonium nitrate, Anilinium nitrate, Anion-exchange resins, Antimony, Antimony hydride, Arsenic (powder), Arsenic hydride, Arsine, B<sub>4</sub>H<sub>10</sub>, Bases (strong), Benzene, Benzidine, Benzo(b)thiophene derivatives, 1,4-Bis(methoxy-methyl)-2,3,5,5-tetramethylbenzene, Bismuth, Boron, Boron decahydride, Boron phosphide, Boron powder, Bromine pentafluoride, Butanethiol, tert-Butyl-m-xylene, n-Butyraldehyde, Cadmium phosphide, Calcium hypophosphite, Carbon, 3-Carene, Cashew nut shell oil, Cesium acetylide, Chlorobenzene, 4-Chloro-2-nitroaniline, <b>Chlorosulfonic acid</b>, Coal, Combustible organics, Copper azide, Copper(I) nitride, Cu<sub>3</sub>N<sub>2</sub>, Creso, 2-Cresol, 3-Cresol, Crotonaldehyde, Cumene, Cyanides, Cyclohexanol, Cyclohexylamine, Cyclopentadienes, C<sub>2</sub>H<sub>5</sub>PH<sub>2</sub>, 1,3-Diaminoethanebis(trimethylgold), Diborane, Di-2,6-butoxyethylether (butex), 2,6-Di-tert-butyl pheno, 1,2-Dichloroethane, Dichloroethylene, Dichloromethane, Dicyclopentadiene, Dienes, Diethylaminoethanol, Diethyl ether, 3,6-Dihydro-1,2,2H-oxazine, Diisopropylether, Dimethyl ether, Dimethyl hydrazine, Dimethyl hydrazine (uns-), 1,1-Dimethyl hydrazine, Dimethyl sulfide, Dinitrobenzenes, 1,3-Dinitrobenzene, Dinitrotoluene, Diphenyldistibene, Diphenylmercury, Diphenyl tin, Disodium phenyl orthophosphate, Divinyl ether, Epichlorohydrin, Ethane sulfonamide, Ethanol, m-Ethylaniline, Ethylene diamine, Ethylene imine, 5-Ethyl-2-methylpyridine, Ethyl phosphine, 5-Ethyl-2-picoline, Fluorine, 2-Formylamino-l-phenyl-1,3-propanediol, Furfural, Furfuryl alcoho, Furfurylidene ketones, Germanium, Glyoxal, Hexalithium disilicide, Hexamethylbenzene, 2,2,4,4,6,6-Hexamethyl-trithiane, 2-Hexenal, Hydrazine, Hydrocarbons, <b>Hydrofluoric acid</b>, Hydrogen iodide, Hydrogen peroxide, Hydrogen selenide, Hydrogen sulfide, Hydrogen telluride, <b>Hydrozoic acid</b>, Ion-exchange resins, Iron(II) oxide powder, Iron monoxide, Isoprene, Ketones (cyclic), Li<sub>6</sub>Si<sub>2</sub>, Lithium, Magnesium, Magnesium phosphide, Magnesium silicide, Magnesium-titanium alloy, Manganese, Mesityl oxide, Mesitylene, Metal acetylides, Metal cyanides, Metal hexacyanoferrates (3-) or (4-), Metal powders, Metal salicylates, Metal thiocyanates, Metals, 4-ethylcyclohexanone, 2-Methyl-5-ethyl pyridine, Methylthiophene, NdP, Nickel tetraphosphide, Nitroaromatics, Nitrobenzene (mono-), Nitromethane, Nonmetal hydrides, Nonmetal powders, Oleum, Oxidizable matter, <b>Perchloric acid</b>, Phenylacetylene + 1,1-dimethylhydrazine, Phosphine, Phosphine derivatives, Phosphonium iodide, Phosphorus, Phosphorus halides, Phosphorus trichloride, <b>Phthalic acid</b>, Phthalic anhydride, Polyalkenes, Polydibromosilane, Polysilylene, Polyurethane foam, Potassium phosphate, monobasic, B-Propiolactone, Propylene oxide, Pyridine, Pyrocachtol, Reductants, Resorcinol, Rubber, Rubidium acetylide, Rubidium carbide, <b>Salicylic acid</b>, Selenium, Selenium iodophosphide, Silicon (powder), Silicone oil, Silver buten-3-ynide, Sodium, Sodium</p>

Chemical	Chemical Hazard and Compatibility Information
	<p>azide, Sodium hydroxide, Stibene, Sucrose, <b>Sulfamic acid</b>, Sulfur dioxide, <b>Sulfuric acid</b>, Terpenes, Tetraborane(10), Tetraphosphorus diiodo triselenide, Tetraphosphorus iodide, Thioaldehydes, Thiocyanates, Thioketones, Thiophene, Tin, Titanium, Titanium alloy, Titanium-magnesium alloy, Toluene, Toluidine, Triazine, Tricadmium diphosphide, Triethylgallium monoetherate, Trimagnesium diphosphide, 2,4,6-Trimethyltrioxane, Trinitrotoluenes, Tris(iodomercury) phosphine, Turpentine, Uranium, Uranium disulfide, Uranium-neodymium alloy, Uranium-neodymium-zirconium alloy, Vinylacetate, Vinylidene chloride, Wood, p-Xylene, mixo-Xylidine, Zinc, Zinc ethoxide, Zirconium-uranium alloys.</p>
Nitric Oxide	<p><b>HAZARDS &amp; STORAGE:</b> An oxidizer. The liquid is a sensitive explosive.</p> <p><b>INCOMPATIBILITIES:</b> Acetic anhydride, Aluminum, Ammonia, Barium oxide, Boron, Boron (amorphous), Boron trichloride, 1,3 Butadiene, Calcium, Carbon disulfide, Carbon + potassium hydrogen tartrate, Charcoal, Chlorinated hydrocarbons, Chlorine monoxide, Chloroform, Chromium, Combustible matter, CsHC2, Cyclopentadiene, Dichlorine oxide, 1,2-Dichloroethane, Dichloroethylene, Dienes, Dimethyl hydrazine (uns-), Ethylene, Fluorine, Fuels, Hydrocarbons, Iron, Magnesium, Manganese, Methanol, Methylene chloride, Na<sub>2</sub>O, Nitrogen trichloride, Olefins, Oxygen, Ozone, Pentacarbonyl iron, Perchloryl fluoride, Phosphine, Phosphine + oxygen, Phosphorus, PNH<sub>2</sub>, Potassium, Potassium sulfide, Propadiene, Propylene, Pyrophoric chromium, Reducing materials, Rubidium acetylide, Rubidium carbide, Sodium, Sodium diphenylketyl, Sulfur, Tetrachloroethane (uns-), 1,1,1-Trichloroethane, Trichloroethylene, Tungsten carbide, Tungsten hydride, Uranium, Uranium dicarbide, Vinyl chloride, Water or steam.</p>
Oxalic Acid	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive and combustible solid.</p> <p><b>INCOMPATIBILITIES:</b> Furfuryl alcohol, Mercury, Oxidizers (strong), Silver, Sodium Chlorite, Sodium hypochlorite.</p>
Oxygen	<p><b>STATEMENT OF HAZARDS:</b> Very reactive. An oxidant. A slight increase in the oxygen content of the air above the normal 21% greatly increases the oxidation or burning rate (and the hazard) of many materials. Contact with liquid will cause frostbite. May initiate fire/explosion in combustible materials. Store in an open area. Separate from combustible materials.</p> <p><b>INCOMPATIBILITIES:</b> Acetaldehyde, Acetone, Acetylene, Alcohols, Alkali metals, Aluminum, Aluminum borohydride, Aluminum hydride, Aluminum tetrahydroborate, aluminum-titanium alloys, Ammonia, Asphalt, Barium, Ba<sub>2</sub>Br<sub>3</sub>, Benzene, Benzoic acid, Beryllium diborohydride, Bis(phenylhydrazine), B<sub>2</sub>H<sub>6</sub>, B<sub>2</sub>H<sub>10</sub>, Boron tribromide, Boron trichloride, Bromotrifluoroethylene, 2-Butanol, Buten-3-yne, Calcium, Calcium phosphide, Carbon disulfide, Carbon monoxide, Carbon tetrachloride, Cesium, Cesium hydride, Charcoal, Chlorinated hydrocarbons, Chlorotrifluoroethylene, Cumene, Cyanogen, Cyclohexane, Cyclohexane-1,3-dione, Cyclooctatetraene, ClOH<sub>14</sub>, Decaborane(14), Diborane, Diboron tetrafluoride, Diethyl ether, Diisopropyl ether, Dimethoxymethane, Dimethyl sulfide, Dimethylketene, Dioxane, 1,1-Diphenylethylene, Diphenylethylene, Disilane, Ethers, Ethyl ether, Ethylene, Fibrous fabrics, Foam rubber, Fuels, Gasoline, Germanium, Glycerol, Halocarbons, Hydrazine, Hydrocarbons, Hydrogen, Hydrogen sulfide, Lithiated dialkylnitrosoamines, Lithium, Lithium hydride, Magnesium, Magnesium hydride, Metal hydrides, Metals, Methane, Methoxycyclooctatetraene, 4-Methoxytoluene, Methylene chloride, Neoprene, Nonmetal hydrides, Oil., Organic matter, P<sub>2</sub>O<sub>3</sub>, Paraformaldehyde, Pentaborane(9), Pentaborane(II), Phosphine, Phosphorus, Phosphorus(III) oxide, Phosphorus tribromide, Phosphorus trifluoride, Polymers, Polytetrafluoroethylene (Teflon), Polyurethane, Polyvinyl chloride, Potassium, Potassium hydride, Potassium peroxide, 2-Propanol, Propylene oxide, Rhenium, Rubidium, Rubidium hydride, Selenium, Sodium hydride, Strontium, Teflon, Tetraborane(10), Tetracarbonylnickel, Tetrafluoroethylene, Tetrafluorohydrazine, Tetrahydrofuran, Tetrasilane, Titanium and alloys, 1,1,1-trichloroethane, Trichloroethylene, Trirhenium nonachloride, Trisilane, Uranium hydride, Wood, p-Xylene.</p>
Peracetic Acid	<p><b>HAZARDS &amp; STORAGE:</b> Unstable. Severe explosion hazard when exposed to heat or by spontaneous chemical reaction. Peracetic acid explodes at 100 °C and decomposes at lower temperatures with the generation of oxygen. A powerful oxidizing agent. Separate from acids, alkalis, organic materials, heavy metals. Normally kept refrigerated.</p> <p><b>INCOMPATIBILITIES:</b> Acetic anhydride, Calcium chloride, 5-p-Chlorophenyl-2,2-dimethyl-3-hexanone, Combustible materials, Diethyl ether, Ether solvents, Metal chloride solutions, Olefins, Organic materials, Potassium chloride, Sodium Chloride, Tetrahydrofuran.</p>
Perchlorates	<p><b>HAZARDS &amp; STORAGE:</b> Unstable. Powerful oxidizers. Moderate explosion hazard when shocked, exposed to heat, or by chemical reaction. Many perchlorates of nitrogenous bases (e.g., hydroxylamine, urea, methylamine, ethylamine, isopropylamine, 4-ethylpyridine, diaminoethane) and organic perchlorates are explosives. Diazonium perchlorates are very dangerous.</p> <p><b>INCOMPATIBILITIES:</b> Aluminum, Benzene, Calcium hydride, Carbon-containing compounds, Charcoal, Ethanol, Magnesium powder, Olefins, Reducing materials, Strontium hydride, Sulfur, Sulfuric Acid, Zinc.</p>

Chemical	Chemical Hazard and Compatibility Information
Perchloric Acid	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive. A powerful oxidizer and a severe explosion hazard. The anhydrous form can explode spontaneously.. Separate from alkalies, organic materials, oxidizing materials, and reducing agents. Protect from freezing,</p> <p><b>INCOMPATIBILITIES:</b> Acetic acid, Acetic anhydride, Acetonitrile, Alcohols, Antimony, Antimony compounds, Azo pigments, Bis-1,2-diaminopropane-cis-ichlorochromium(III) perchlorate, Bismuth, Carbon, Carbon tetrachloride, Combustible materials, Copper dichromium tetraoxide, Dehydrating agents, Dibutyl sulfoxide, Diethyl ether, Dimethyl ether, Dimethyl sulfoxide, DNA, Ethylbenzene, Fluorine, Glycol ethers, Glycols, Hydrochloric acid, Hydrofluoric acid, Hydrogen halides, Hypophosphites, Iodides, Iron sulfate, Iron(II) sulfate, Ketones, Methanol, 2-Methylcyclohexanone, Nitric acid, Nitrogen triiodide, Nitrogenous epoxides, Nitrosophenol, Oleic acid, Organophosphorus compounds, Paper, o-Periodic acid, Phenyl acetylene, Phosphine, P<sub>2</sub>O<sub>5</sub>, Pyridine, Sodium phosphinate, Steel, Sulfinyl chloride, Sulfoxides, Sulfur trioxide, Sulfuric acid, Trichloroethylene, Vegetable matter, Wood, Zinc phosphide.</p>
Phenol	<p><b>HAZARDS &amp; STORAGE:</b> Severe health hazard. Corrosive and combustible as a solid. Separate from oxidizers and acute fire hazards. Store in tightly closed containers.</p> <p><b>INCOMPATIBILITIES:</b> Acids (strong), Aliphatic amines, Aluminum chloride, Amides, Butadiene, Calcium hypochlorite, Caustics, Formaldehyde, Oxidizing materials, Peroxydisulfuric acid, Peroxymonosulfuric acid.</p>
Phosphoric Acid	<p><b>HAZARDS &amp; STORAGE:</b> Corrosive. Separate from alkalies and most metals.</p> <p><b>INCOMPATIBILITIES:</b> Caustics (strong), Nitromethane, Sodium tetrahydroborate.</p>
Phosphorous(White)	<p><b>STATEMENT OF HAZARDS:</b> Pyrophoric. Sever health hazard. Combustion by-products may include oxides of phosphorus, Phosphine, and phosphoric acid if water is present. May explode on impact. Moderate explosion hazard by chemical reaction. More reactive than red phosphorus. Separate from air, oxidizing materials, combustibles. Always keep container closed, with material under water or inert gas.</p> <p><b>INCOMPATIBILITIES:</b> Air, Alkaline hydroxides, Ammonium nitrite, Antimony pentafluoride, Barium bromate, Barium chlorate, Barium iodate, Beryllium, Bromine, Bromine azide, Bromine trifluoride, Calcium bromate, Calcium chlorate, Calcium iodate, Caustics (strong), Cerium, Cesium, CsHC<sub>2</sub>, Cesium nitride, Chlorine dioxide, Chlorine monoxide, Chlorine trifluoride, Chlorine trioxide, Chlorosulfonic acid, Chlorosulfuric acid, Chromium trioxide, Chromyl chloride, Copper, FNO<sub>2</sub>, Halogen azides, Halogens, Hexalithium disilicidelodine monobromide, Iodine monochloride, Iodine pentafluoride, Iron, K<sub>3</sub>N, Lanthanum, Lead dioxide, Lithium, Lithium carbide, Li<sub>6</sub>CS, Magnesium bromate, Magnesium chlorate, Magnesium iodate, Manganese, Manganese perchlorate, Mercuric oxide, Mercury nitrate, Neodymium, Nickel, Nitrates, Nitrogen bromide, Nitrogen chloride, Nitrogen dioxide, Nitrogen tribromide, Nitrogen trichloride, NOR, Oxidizing agents, Oxygen, Performic acid, Peroxyformic acid, Platinum, Potassium, Potassium bromate, Potassium chlorate, Potassium hydroxide, Potassium iodate, Potassium permanganate, Rubidium, RbHC<sub>2</sub>, Selenium chloride, Selenium tetrafluoride, Selenium hypochlorite, SeOF<sub>2</sub>, Silver nitrate, Silver oxide, Sodium, Sodium bromate, Na<sub>2</sub>C<sub>2</sub>, Sodium chlorate, Sodium hydroxide, Sodium iodate, Sodium peroxide, Sulfur, Sulfur trioxide, Sulfuric acid, Thorium, Vanadium oxychloride, Zinc bromate, Zinc chlorate, Zinc iodate, Zirconium.</p>
Phosphorus Pentoxide	<p><b>HAZARDS &amp; STORAGE:</b> Keep tightly sealed or stoppered. Absorbs moisture from air with avidity, forming meta, pyro, or orthophosphoric acid depending on condition of absorption. Reacts violently with water to evolve heat.</p> <p><b>INCOMPATIBILITIES:</b> Bases (inorganic), Bromine pentafluoride, Calcium oxide, Chlorine trifluoride, Formic acid, Hydrogen fluoride (Hydrofluoric acid), Hydrogen peroxide, Iodides, Metals, Methyl hydroperoxide, Oxidants, Oxygen difluoride, Perchloric acid, 3-Propynol, Propargyl alcohol, Sodium hydroxide, Water.</p>
Picric Acid	<p><b>HAZARDS &amp; STORAGE:</b> Flammable solid. Air or oxygen is not required for decomposition or oxidation. Serious health hazard. Strong sensitizer. May cause sever allergic reaction and dermatitis. Very unstable. A severe explosion hazard when shocked or exposed to heat. It easily forms picrate salts, which are more sensitive explosives than picric acid. Store in a cool, dry, well ventilated detached location. Do not allow material to become dry. Isolate from organic materials; transition and heavy metals.</p> <p><b>INCOMPATIBILITIES:</b> Ammonia, Bases, Concrete, Copper, Lead, Mercury, Metals, Reducing materials, Salts, Uranium perchlorate, Zinc.</p>
Potassium	<p><b>HAZARDS &amp; STORAGE:</b> Combustible solid. Corrosive. Water reactive. A storage hazard. Reaction with moisture leads to ignition and can result in an explosion. Potassium forms an unstable, explosive peroxide and super oxide coating when stored under mineral oil. Handling the stored metal can lead to explosions. Separate from water, acids, halogens, silicates, sulfates, nitrates, carbonates, phosphates, oxides and hydroxides of heavy metals, organics, and Teflon.</p> <p><b>INCOMPATIBILITIES:</b> Acid fumes, Air, Alcohols, Aluminum bromides, Aluminum chlorides, Aluminum fluorides, Aluminum tribromide, Ammonium bromide, Ammonium chlorocuprate, Ammonium iodide, Ammonium nitrate, Ammonium tetrachlorocuprate, Antimony halides, Antimony oxide, Antimony</p>

Chemical	Chemical Hazard and Compatibility Information
	<p>tribromides, Antimony trichlorides, Antimony triiodides, Arsenic halides, Arsenic trichloride, Arsenic triiodide, Benzyl alcohol, Bismuth tribromides, Bismuth trichlorides, Bismuth triiodides, Bismuth trioxide, Boric acid, Boron tribromide, Bromine vapor, Bromoform, Cadmium bromides, Cadmium chlorides, Cadmium iodides, Calcium bromide, Carbon, Carbon dioxide (solid), Carbon disulfide, Carbon monoxide, Carbon tetrachloride, Charcoal (activated), Chlorinated hydrocarbons, Chlorine, Chlorine oxide, Chlorine trifluoride, Chloroethane, Chloroform, Chromium tetrachloride, Chromium trioxide, Cobalt(II) chloride, COC<sub>12</sub>, Copper hypochlorite, Copper oxide, Copper(I) chloride, Copper(I) iodide, Copper(II) bromide, Copper(II) chloride, Copper(II) oxide, Cyclohexanol, Dibromomethane, Dichlorine oxide, Dichloroethane, Dichloromethane, Diiodomethane, Dimethyl sulfoxide, Dinitrogen pentaoxide, Dinitrogen tetraoxide, Diselenium dichloride, Disulfur dichloride, Ethylene oxide, Fluorine, Graphite, Halocarbons, Hydrazine, Hydrogen bromide (Hydrobromic acid), Hydrogen chloride (Hydrochloric Acid), Hydrogen iodide, Hydrogen peroxide, Interhalogens, Iodine, Iodine bromide, Iodine chloride, Iodine pentafluoride, Iodine trichloride, Iron(II) bromide, Iron(II) chloride, Iron(II) iodide, Iron(III) bromide, Iron(III) chloride, Lead dioxide, Lead hypochlorite, Lead peroxide, Lead sulfate, Maleic anhydride, Manganese(II) chloride, Mercury, Mercury(I) oxide, Mercury(II) bromide, Mercury(II) chloride, Mercury(II) fluoride, Mercury(II) iodide, Mercury(II) oxide, Metal halides, Metal oxides, Moisture, Molybdenum trioxide, Molybdenum(III) oxide, Nickel bromide, Nickel chloride, Nickel iodide, Nitric acid, Nitrobenzene, Nitrogen dioxide, Nitrogen-containing explosives, Nonmetal halides, Nonmetal oxides, n-Octanol, Oxalyl dibromide, Oxalyl dichloride, Oxidizers, Pentachloroethane, Peroxides, Phosgene, Phosphorus, Phosphorus pentachloride, Phosphorus tribromide, Phosphorus trichloride, P<sub>2</sub>NF, P<sub>2</sub>OS, Picric acid, Potassium chlorocuprate, Potassium oxides, n-Propanol, Seleninyl bromide, Seleninyl chloride, Selenium, Selenium hypochlorite, Silicon tetrachloride, Silver fluoride, Silver iodate, Sodium iodate, Sodium peroxide, Sulfur, Sulfur dibromide, Sulfur dichloride, Sulfur dioxide, Sulfuric acid, Teflon, Tellurium, Tetrachloroethane, Thallium(I) bromide, Thiophosphoryl fluoride, Tin chlorides, Tin iodide, Tin(IV) oxide, Trichloroethane, Vanadium hypochlorite, Vanadium(V) chloride, Water, Zinc bromide, Zinc chloride, Zinc iodide.</p>
Potassium Chlorate	<p><b>HAZARDS &amp; STORAGE:</b> Store in a cool, dry, well-ventilated location.  <b>INCOMPATIBILITIES:</b> Acids, Alkalies, Aluminum, Aluminum dust, Ammonia, Ammonium chloride, Ammonium sulfate, Ammonium thiocyanate, Antimony trisulfide, Arsenic, Arsenic trisulfide, Barium hypophosphite, Barium phosphinate, Barium sulfide, Barium thiocyanate, Boron powder, Calcium hydride, Calcium hypophosphite, Calcium phosphinate, Calcium sulfide, Carbon, Charcoal, Chromium dust, Combustibles, Copper dust, Cu<sub>3</sub>P<sub>2</sub>, Cyanides, Cyanoguanidine, Dinickel trioxide, Fabrics, Fluorine, fluorine perchlorate gas, Gallic acid, Germanium dust, Glucose, Hydrocarbons, Hydrogen iodide, Lactose, Magnesium dust, Manganese dioxide, Metal (finely divided), Metal hypophosphites, Metal phosphides, Metal phosphinates, Metal sulfides, Metal thiocyanates, Nonmetals (powdered), Organic acids (dibasic), Organic matter, Peat, Phosphorus powder, Potassium hydroxide, Reducing agents, Sawdust, Silver sulfide, Sodium amide, Sodium phosphinate, Steel dust, Strontium hydride, Sucrose, Sugars, Sulfur compounds, Sulfur dioxide, Sulfur dioxide solutions in ether or ethanol, Sulfuric acid, Tannic acid, Thiocyanates, Thiuram, Thorium dicarbide, Titanium dust, Tricopper diphosphide, Trimercury tetraphosphide, Zinc dust, Zirconium dust.</p>
Potassium Cyanide	<p><b>HAZARDS &amp; STORAGE:</b> Serious health hazard. Corrosive. Reacts with water or any acid releasing hydrogen cyanide. Separate from water, acids, carbon dioxide, and strong oxidizers including acids, acid salts, chlorates, and nitrates. Store in glass or metal containers that are securely closed or sealed. Potassium cyanide will absorb moisture from the air and will form a syrup.  <b>INCOMPATIBILITIES:</b> Acids or Acid fumes, alkaloids, chloral hydrate, iodine, metallic salts, permanganates, chlorates, peroxides.</p>
Potassium Perchlorate	<p><b>HAZARDS &amp; STORAGE:</b> A powerful oxidizer.  <b>INCOMPATIBILITIES:</b> Aluminum powder, Charcoal, Cotton lint, Ethanol, Ethylene glycol, Ferrocenium diamminetetraakis (thiocyanato-N) chromate(1-), Fluorine, Furfural, Iron powder, Lactose, Magnesium powder, Metal powders, Molybdenum powder, Nickel powder, Potassium hexacyanocobaltate (3-), Reducing agents, Sulfur, Tantalum powder, Titanium hydride, Titanium powder.</p>
Potassium Permanganate	<p><b>HAZARDS &amp; STORAGE:</b> A powerful oxidizer. A dangerous explosion hazard.  <b>INCOMPATIBILITIES:</b> Acetaldehyde, Acetic acid, Acetic anhydride, Acetylacetone, Aluminum carbide, Ammonia, Ammonium hydroxide, Ammonium nitrate, Ammonium perchlorate, Antimony, Arsenic, Benzaldehyde, Carbon, 3-Chloropropane-1,2-diol, Dichloromethylsilane, Dimethyl sulfoxide, Dimethylformamide, Erythritol, Ethylene glycol, Ethylene glycol esters, Formaldehyde, Glycerol, H<sub>2</sub>S<sub>3</sub>, Hydrochloric acid (concentrated), Hydrofluoric acid (concentrated), Hydrogen peroxide, Hydrogen trisulfide, Hydroxylamine, Isobutyraldehyde, Lactic acid, Mannitol, Nitrates, Nitro compounds (organic), Organic materials (dry or in solution), Oxalic acid, Oxidizable materials (dry or in solution), Oxygenated organic</p>

Chemical	Chemical Hazard and Compatibility Information
	compounds, Phosphorus, Polypropylene.
Pyridine	<b>HAZARDS &amp; STORAGE:</b> Serious health hazard. Flammable liquid. Outside or detached storage is preferred. Isolate from oxidizing materials and acids. <b>INCOMPATIBILITIES:</b> Acids (strong), Bromine trifluoride, Chlorosulfonic acid, Chromic acid, Chromium trioxide, Dinitrogen tetroxide, Fluorine, Maleic anhydride, Nitric acid, Oleum, Oxidizing materials, Perchromates, <i>B</i> -Propiolactone, Silver perchlorate, Sulfuric acid, Trifluoromethyl hypofluorite.
Selenium	<b>HAZARDS &amp; STORAGE:</b> Selenium should be stored in tightly closed containers that are kept dry. Selenium should be kept away from strong oxidizers such as fluorine, bromine, chlorine and strong acids. <b>INCOMPATIBILITIES:</b> Acids, Barium carbide, Bromine, Bromine pentafluoride, Calcium carbide, Chlorates, Chlorine, Chlorine trifluoride, Chromium trioxide, Fluorine, Lithium carbide, Lithium silicon, Metal amides, Nickel, Nitric acid, Nitrogen trichloride, Oxidizing agents (strong), Oxygen, Potassium, Potassium bromate, Rubidium carbide, Silver bromate, Sodium, Strontium carbide, Thorium carbide, Uranium, Zinc.
Silver and its compounds	<b>HAZARDS &amp; STORAGE:</b> Personnel handling silver should be equipped with protective clothing and equipment in order to prevent skin and eye contact. Store silver away from incompatible materials. <b>INCOMPATIBILITIES:</b> 3-Bromopropyne, Acetylene, Acetylene compounds, Ammonia, Aziridine, Bromine azide, Bromoazide, Carboxylic acids, Chlorine trifluoride, Ethyl hydroperoxide, Ethylene imine, Ethylene oxide, Ethylene peroxide, Ethyleneimine, Fulminic acid, Hydrochloric Acid, Hydrogen peroxide, Iodoform, Metal cyanides, Nitric acid, Oxalic acid, Ozonide, Peroxomonosulfuric acid, Peroxyformic acid, Sulfur, Sulfuric acid, Tartaric acid.
Sodium	<b>HAZARDS &amp; STORAGE:</b> Corrosive. Combustible solid. May ignite spontaneously on exposure to moist air. Water reactive. Separate from water. <b>INCOMPATIBILITIES:</b> Acids, Air, Aluminum tribromide, Aluminum trichloride, Aluminum trifluoride, Ammonium chlorocuprate, Ammonium nitrate, Antimony tribromide, Antimony trichloride, Antimony triiodide, Arsenic trichloride, Arsenic triiodide, Bismuth oxide, Bismuth tribromide, Bismuth trichloride, Bismuth triiodide, Boron tribromide, Bromine, Bromoazide, Carbon dioxide, Carbon tetrachloride, Chlorine, Chlorine trifluoride, Chromium tetrachloride, Chromium trioxide, Cobalt bromide, Cobalt chloride, Copper chloride, Copper oxide, 1,2-Dichloroethylene, Dichloromethane, Fluorine, Halogenated hydrocarbons, Halogens, Hydrazine hydrate, Hydrogen chloride (Hydrochloric acid), Hydrogen fluoride (Hydrofluoric acid), Hydrogen peroxide, Hydrogen sulfide, Hydroxylamine, Iodine, Iodine monochloride, Iodine pentafluoride, Iron dibromide, Iron diiodide, Iron trichloride, Lead oxide, Maleic anhydride, Manganous chloride, Mercuric bromide, Mercuric chloride, Mercuric fluoride, Mercuric iodide, Mercurous chloride, Mercurous oxide, Methyl chloride, Moisture, Molybdenum trioxide, Monoammonium phosphate, Nitric acid, Nitrogen peroxide, Nitrosyl fluoride, Nitrous oxide, Oxidizing materials, Phosgene, Phosphorus, Phosphorus pentafluoride, Phosphorus pentoxide, Phosphorus tribromide, Phosphorus trichloride, Phosphoryl chloride, Potassium oxides, Potassium ozonide, Potassium superoxide, Selenium, Silicon tetrachloride, Silver bromide, Silver chloride, Silver fluoride, Silver iodide, Sulfuric acid, Sodium peroxide, Stannic chloride, Stannic oxide, Stannous chloride, Sulfur, Sulfur dibromide, Sulfur dichloride, Sulfur dioxide, Tellurium, Tetrachloroethane, Thallous bromide, Thiophosphoryl bromide, Trichlorethylene, Vanadium pentachloride, Vanadyl chloride, Water, Zinc bromide.
Sodium Cyanide	<b>HAZARDS &amp; STORAGE:</b> Corrosive, Reacts with acid to release hydrogen cyanide gas. Separate from water, acids, and carbon dioxide. <b>INCOMPATIBILITIES:</b> Acids, Air, Chlorate, Fluorine, Magnesium, Nitrates, Nitric acid, Nitrites, Water or Steam.
Sodium Hypochlorite	<b>HAZARDS &amp; STORAGE:</b> Solutions of sodium hypochlorite in water are storage hazards due to oxygen evolution. Sodium hypochlorite solutions should be stored away from acids in well-fitted, air-tight bottles, closed with a glass stopper or suitable plastic cap. Sodium hypochlorite solution should be stored at 15 to 18 °C and out of direct sunlight, which accelerates decomposition. Long storage is impossible without decomposition. <b>INCOMPATIBILITIES:</b> Acid or Acid fumes, benzyl cyanide, Carbon (activated), Carbon dioxide, Ethyleneimine, Formic Acid, Methanol, Oxidizers (strong), Reducing agents, Urea.
Sodium Nitrate	<b>HAZARDS &amp; STORAGE:</b> A powerful oxidizer. Explodes when heated to over 538 °C. <b>INCOMPATIBILITIES:</b> Acetic anhydride, Aluminum powder, Antimony powder, Barium thiocyanate, Bitumen, Boron phosphide, Calci-silicon alloy, Cyanides, Magnesium, Metal amidosulfates, Metal cyanides, Nonmetals, Organic matter, Peroxyformic acid, Sodium, Sodium hypophosphite, Sodium phosphinate, Sodium thiosulfate.
Sodium Peroxide	<b>HAZARDS &amp; STORAGE:</b> Reacts explosively or violently under the appropriate conditions with the following incompatible chemicals listed.

Chemical	Chemical Hazard and Compatibility Information
	<p><b>INCOMPATIBILITIES:</b> Acetic acid, Acetic anhydride, Acids, Almond oil, Aluminum, Ammonium sulfate, Aniline, Antimony, Arsenic, Benzene, Boron, Boron nitride, Calcium acetylde, Carbon, Charcoal, Copper, Cotton, Diselenium dichloride, Disulfur dichloride, Ethanol, Ethyl ether, Ethylene glycol, Glycerol, Hexamethylene-tetramine, Hydrogen sulfide, Hydroxy compounds, Magnesium, Manganese dioxide, Metals, Nonmetal halides, Nonmetals, Organic matter, Paraffin, Peroxyformic acid, Phosphorus, Phosphorus trichloride, Potassium, Reducing materials, Selenium, Soap, Sodium, Sodium dioxide, Sulfur, Sulfur chloride, Tin, Water, Wood, Wool, Zinc.</p>
Sulfuric Acid	<p><b>HAZARDS &amp; STORAGE:</b> A very powerful acidic oxidizer. Corrosive, Water reactive, Reaction with metals produces hydrogen gas. Seperate from combustibles and other reactive materials. Separate from carbides, chlorates, fulminates, nitrates, picrates, and powdered metals.</p> <p><b>INCOMPATIBILITIES:</b> Acetic acid, Acetone cyanhydrin, Acetonitrile, Acrolein, Acrylonitrile, Allyl alcohol, Allyl chloride, 2-Amino ethanol, Ammonia, Ammonium hydroxide, Aniline, Bromine pentafluoride, n-Butyraldehyde, Carbides, Chlorates, Chlorine trifluoride, Chlorosulfonic acid, CoHC<sub>2</sub>, Copper nitride, Diisobutylene, Epichlorohydrin, Ethylene cyanhydrin, Ethylene diamine, Ethylene glycol, Ethylene imine, Fulminates, Hexalithium disilicide, Hydrogen, Hydrogen chloride (Hydrochloric Acid), Iodine heptafluoride, Iron, Isoprene, Mercury nitride, Mesityl oxide, Metals, p-Nitrotoluene, Nitric acid, Organics, Oxidizing materials, P(OCN)<sub>3</sub>, Pentasilver trihydroxydiamino phosphate, Perchlorates, Perchloric acid, 1-Phenyl-2-methyl propyl alcohol + hydrogen peroxide, Phosphorus, Picrates, Potassium chlorate, Potassium permanganate, Potassium-tert-butoxide, R-Propiolactone, Propylene oxide, Pyridine, RbHC<sub>3</sub>, Reducing materials, Sodium, Sodium carbonate, Sodium hydroxide, Steel, Styrene monomer, Triperchromate, Vinyl acetate, Water.</p>
Toluene	<p><b>HAZARDS &amp; STORAGE:</b> Flammable liquid. May accumulate static electricity. Moderate health hazard. Inside storage should be in a standard flammable liquids room or cabinet. Keep separate from oxidizing materials.</p> <p><b>INCOMPATIBILITIES:</b> Bromine trifluoride, 1,3-Dichloro-5,5-dimethyl-2,4-imidazolididione, Dinitrogen tetroxide, Nitric acid (conc.), Oxidizing materials, Silver perchlorate, Tetranitromethane, Uranium hexafluoride.</p>
Xylene	<p><b>HAZARDS &amp; STORAGE:</b> Flammable liquid. May accumulate static electricity. Moderate health hazard. Separate from acetic acid, nitric acid, and strong oxidizing materials. Inside storage should be in a standard flammable liquid storage room or cabinet.</p> <p><b>INCOMPATIBILITIES:</b> Acetic Acid, 1,3-Dichloro-5,5-dimethyl-2,4-imidazolidindione, Nitric acid, Oxidizing materials.</p>