

## Hazardous Material/Hazardous Waste Storage Incompatibility Chart

Substances in bold have detailed example lists on the next page.

If the material contains:	It may not be stored with any of the following:
<b>Acid</b> (pH below 2.0)	<b>Caustics</b> (pH above 12.5) <b>Reactive Metals</b> Alcohol Water Aldehydes Halogenated, Nitrated, or Unsaturated Hydrocarbons <b>Reactive Organic Compounds and Solvents</b> Spent Cyanide and Sulfide Solutions <b>Oxidizers</b>
<b>Caustic</b> (pH above 12.5)	<b>Acid</b> (pH below 2.0) <b>Reactive Metals</b> Alcohol Water Aldehydes Halogenated, Nitrated, or Unsaturated Hydrocarbons <b>Reactive Organic Compounds and Solvents</b>
<b>Reactive Metals</b>	<b>Caustics</b> <b>Acids</b> Alcohol Aldehydes Halogenated, Nitrated, or Unsaturated Hydrocarbons <b>Reactive Organic Compounds and Solvents</b> <b>Oxidizers</b>
<b>Reactive Organic Compounds and Solvents</b>	<b>Caustics</b> <b>Acids</b> <b>Reactive Metals</b>
<b>Spent Cyanide and Sulfide Solutions</b>	<b>Acids</b>
<b>Oxidizers</b>	Acetic or Other Organic Acids Concentrated Mineral Acids <b>Reactive Metals</b> <b>Reactive Organic Compounds and Solvents</b> <b>Ignitable [Flammable/Combustible] Wastes*</b>

\***Ignitable** in this context refers to substances with a flashpoint below 140°F and includes:  
 Combustible substances, with a flashpoint below 140°F  
 Flammable substances, with a flashpoint below 100°F.

### Some Deadly Combinations

Acids + Oil or Grease = Fire

Flammable Liquids + Hydrogen Peroxide = Fire/Explosion

Acids + Caustics = Heat/Spattering

Aluminum Powder + Ammonium Nitrate = Explosion

Caustics + Epoxies = Extreme Heat

Sodium Cyanide + Sulfuric Acid = Lethal Hydrogen Cyanide

Chlorine Gas + Acetylene = Explosion

Ammonia + Bleach = Noxious Fumes

In general:

**Reactives** must be segregated from **Ignitables**

**Acids** must be segregated from **Caustics**

**Corrosives** should be segregated from **Flammables**

**Oxidizers** should be segregated from EVERYTHING

**Many Corrosives** are "Water Reactive"

Most **Organic Reactives** must be segregated from **Inorganic Reactives** (metals)

Ignitables (Flammables/Combustibles)	Acids	Corrosives Caustics
Carburetor Cleaners Engine Cleaners Epoxy, Resins, Adhesives, and Rubber Cements Finishes Fuels Lacquers Paints Paint Thinners Paint Wastes Pesticides that contain Solvents (such as Methyl Alcohol, Ethyl Alcohol, Isopropyl Alcohol, Toluene, Xylene) Petroleum Solvents (Drycleaning Fluid) Solvents: Acetone Benzene Carbon Tetrachloride (Carbon Tet) Ethanol (Ethyl Alcohol) Ethyl Benzene Isopropanol (Isopropyl Alcohol) Kerosene (Fuel Oil #1) Methanol (Wood Alcohol) Methyl Ethyl Ketone (MEK) Petroleum Distillates Tetrahydrofuran (THF) Toluene (Methacide, Methylbenzene, Methylbenzol, Phenylmethane, Toluol, Antisal 1A) White Sprits (White Spirits, Mineral Spirits, Naptha) Xylene (Xylol) Stains Stripping Agents Varsol Waste Fuels Waste Ink Wax Removers Wood Cleaners	Battery Acids Degreasers and Engine Cleaners Etching Fluids Hydrobromic Acid Hydrochloric Acid (Muriatic Acid) Nitric Acid (<40%)(Aquafortis) Phosphoric Acid Rust Removers Sulfuric Acid (Oil and Vitriol)	Acetylene Sludge Alkaline Battery Acids Alkaline Cleaners Alkaline Degreasers Alkaline Etching Fluids Lime and Wastewater Potassium Hydroxide (Caustic Potash) Rust Removers Sodium Hydroxide (Caustic Soda, Soda Lye)
	<b>Reactive Metals</b>	<b>Reactive Organic Compounds and Solutions</b>
	Lithium (Batteries) Aluminum Beryllium Calcium Magnesium Sodium Zinc Powder	Alcohols Aldehydes Chromic Acids (from chrome plating, copper stripping and aluminum anodizing) Cyanides (from electroplating operations) Hypochlorides (from water treatment plants, swimming pools, sanitizing operations) Organic Peroxides (including Hydrogen Peroxide) Perchlorates Permanganates Sulfides
	<b>Oxidizers</b>	
	Chlorine Gas Nitric Acid (>40%), aka Red Fuming Nitric Nitrates (Sodium Nitrate, Ammonium Nitrate) Perchlorates Perchloric Acid Peroxides Calcium Hypochlorite (>60%)	