

IUPUI Chemical Segregation and Storage Chart

CLASS OF CHEMICALS	RECOMMENDED STORAGE METHOD	CHEMICAL EXAMPLES	INCOMPATIBLES
Flammable Compressed Gases	Store in a cool, dry area, away from oxidizing gases. Securely strap or chain cylinders to a wall or bench top.	Methane, Acetylene, Propane	Oxidizing and toxic compressed gases, oxidizing solids.
Oxidizing Compressed Gases	Store in a cool, dry area, away from flammable gases and liquids. Securely strap or chain cylinders to a wall or bench top.	Oxygen, Chlorine, Bromine	Flammable gases.
Poisonous Compressed Gases	Store in a cool, dry area, away from flammable gases and liquids. Securely strap or chain cylinders to a wall or bench top.	Carbon monoxide, Hydrogen sulfide	Flammable and/or oxidizing gases.
Inorganic Acids	Store in a separate, lined/protected acid storage cabinet. <i>DONOT store acids on metal shelves</i>	Hydrochloric acid, Sulfuric acid, Chromic acid, Nitric acid. <i>Note: Nitric acid is a strong oxidizer and should be stored by itself. Separate nitric acid from other acids by storing it in a secondary container or separate acid cabinet.</i>	Flammable liquids, flammable solids, bases, and oxidizers. Organic acids
Organic Acids	Store in a separate, lined/protected acid storage cabinet. <i>*DO NOT store acids on metal shelves *</i>	Acetic acid, Trichloroacetic acid, Lactic acid	Flammable liquids, flammable solids, bases, and oxidizers. Inorganic acids
Bases	Store in a separate storage cabinet.	Ammonium hydroxide, Potassium hydroxide, Sodium hydroxide	Flammable liquids, oxidizers, poisons, and acids.
Explosives	Store in a secure location away from all other chemicals. Do not store in an area where they can fall.	Ammonium Nitrate, Nitro Urea, Sodium azide, Trinitroaniline, Trinitroanisole, Trinitrobenzene, Trinitrophenol/Picric acid, Trinitrotoluene (TNT).	All other chemicals.
Flammable Liquids	Store in a flammable storage cabinet. <i>*Peroxide forming chemicals must be dated upon opening e.g. Ether, Tetrahydrofuran *</i>	Acetone, Benzene, Diethyl ether, Methanol, Ethanol, Hexanes, Toluene	Acids, bases, oxidizers, and poisons.
Flammable Solids	Store in a separate dry cool area away from oxidizers, corrosives.	Phosphorus, Carbon, Charcoal	Acids, bases, oxidizers, and poisons.
Water Reactive Chemicals	Store in a dry, cool location. Protect from water and the fire sprinkler system, if applicable. Label location - WATER REACTIVE CHEMICALS-	Sodium metal, Potassium metal, Lithium metal, Lithium Aluminium hydride	Separate from all aqueous solutions, and oxidizers.
Oxidizers	Store in a spill tray inside a non-combustible cabinet, separate from flammable and combustible materials.	Sodium hypochlorite, Benzoyl peroxide, Potassium permanganate, Potassium chlorate, Potassium dichromate. The following are generally considered oxidizing substances: Peroxides, Perchlorates, Chlorates, Nitrates, Bromates, Superoxides	Separate from reducing agents, flammables, and combustibles and organic materials.
Poisons/Toxic	Store separately in a vented, cool, dry, area in chemically resistant secondary containers.	Cyanides, heavy metal compounds, i.e. Cadmium, Mercury, Osmium	Flammable liquids, acids, bases, and oxidizers.
General Chemicals- Non Reactive	Store on general laboratory benches or shelving.	Agar, Sodium chloride, Sodium bicarbonate, and most non-reactive salts	See MSDS or SDS

Questions: Please contact the IUPUI Laboratory Safety Manager at 278-6150