





CHEMICAL SEGREGATION & STORAGE

Always Consult the Manufacturer's Safety Data Sheet (SDS) Prior to Storage and Handling

CATEGORIES	RECOMMENDED STORAGE METHOD	COMMON EXAMPLES	INCOMPATIBILITIES (See SDS in all cases)
Corrosives 	Acids: <ul style="list-style-type: none"> ❖ Must be stored in corrosive storage cabinet. ❖ Within the acid cabinet store each of the following groups separately via secondary containers: inorganic (e.g., Hydrochloric acid), and organic (e.g., Formic acid). ❖ Oxidizing acids (e.g., Nitric acids, chromic acid). See Oxidizers. 	Hydrochloric acid, sulfuric acid, phosphoric acid, mineral acids, acrylic acid, propionic acid.	Oxidizing acids, bases, amines.
	Bases: Store separately from acids by secondary containment or separated cabinet.	Sodium hydroxide	Acids, oxidizers.
Flammables 	<ul style="list-style-type: none"> ❖ Store in grounded flammable storage cabinet. ❖ Flammable solids must be segregated from flammable liquids via secondary containment. ❖ Flammables should not be stored in a household refrigerator. ❖ Label containers of peroxide formers with receiving, opening, and disposal dates. Must be tested in a timely manner. 	Acetone, Ethanol, benzene, xylene, methanol, toluene, some amines. Peroxide formers (e.g., ethers, Tetrahydrofuran).	Oxidizers, pyrophorics, Water reactives, non-flammable toxics. https://www.clemson.edu/research/safety/manuals/labSafety/appE.html#AppenE
Toxics 	<ul style="list-style-type: none"> ❖ If toxics can be categorized as an oxidizer or acid, store as such, but best practice is to store separately. ❖ Highly toxic store separately from all other chemicals. ❖ Store cyanide salts and sulfides separately from acids. 	Cyanides, heavy metals compounds (e.g., mercury), methyl iodide, sulfides.	Flammable liquids, acids, bases, oxidizers.
Oxidizers 	<ul style="list-style-type: none"> ❖ Store in separate cabinet. Keep away from flammables, peroxide formers, reducing agents and organic acids. ❖ All oxidizers should be considered shock-sensitive. 	Nitric acid, peroxides, perchlorates, chromates.	Reducing agents, flammables, organic acids.
Water Reactives	<ul style="list-style-type: none"> ❖ Must be stored in dry, cool location, separated from other categories. Keep from oxidizers, flammables and non-flammable toxics. ❖ Must be kept as far as possible from water resources. 	Sodium, lithium, potassium metals, calcium hydride.	All aqueous solutions, flammables, oxidizers.
Pyrophorics	<ul style="list-style-type: none"> ❖ Storage of pyrophoric chemicals should be minimized. Must be stored in dry, cool location. Keep away from sources of heat and ignition, and other categories. 	Sodium methylate, tert-Butyl lithium.	Flammables, combustibles, oxidizers, and other incompatibles.
General Chemicals	<ul style="list-style-type: none"> ❖ Store on general laboratory benches or secured shelving preferably behind glass doors. 	Agar, most non-reactive salts.	See SDS