

# Chemical Segregation and Storage Table

CHEMICAL CLASS	RECOMMENDED STORAGE METHOD	CHEMICAL EXAMPLES	INCOMPATIBLES Always consult SDS
<b>Flammable Compressed Gases</b>	Store in a cool, dry area, avoid oxidizing gases. Gas cylinders should be strapped (chained) securely to a wall or sturdy bench top	Methane, Acetylene, Propane	Oxidizing and toxic compressed gases
<b>Compressed Gases (oxidizers)</b>	Store in a cool, dry area, separate from flammable gases and liquids. Gas cylinders should be strapped (chained) securely to a wall or sturdy bench top	Oxygen, Chlorine Bromine	Flammable gases
<b>Compressed Gases (Poisonous)</b>	Store in a cool, dry area, separate from flammable gases and liquids. Gas cylinders should be strapped (chained) securely to a wall or sturdy bench top	Carbon monoxide Hydrogen sulfide	Flammable and/or oxidizing gases
<b>Corrosives – Inorganic acids</b>	Store in appropriate acid cabinets. Separate from bases and organic acids. Do not store on metal shelves. Nitric acid (strong oxidizer) should be stored by itself in a secondary container or other acid cabinet if available	Minerals acids (Hydrochloric/sulfuric/Chromic/Nitric).	Flammable liquids, flammable solids, bases and oxidizers. Organic acids.
<b>Corrosives-Organic acids</b>	Store in appropriate acid cabinets. Separate from inorganic acids. Avoid storing on metal shelves	Acetic acid Formic acid Propionic acid	Flammable liquids/ solids Bases, Oxidizers Inorganic acids
<b>Corrosives-Inorganic Bases</b>	Store in appropriate corrosives cabinet separate from acids	Potassium hydroxide, Ammonium hydroxide	Flammable liquids, acids, oxidizers, organic bases
<b>Corrosives-Organic Bases</b>	Store in corrosives cabinet, separated from acids and inorganic bases	Hydroxylamine Tetramethylethylamine Diamine, Triethylamine	Acids Oxidizers Hypochlorites Inorganic bases
<b>Explosives</b>	Store in a secure location away from other chemicals, store in areas away from shock or friction	Trinitrophenol, Picric Acid, Diazoisobutylnitrile Cyclonite	Consult SDS sheets or RMS for chemical and process specific info
<b>Flammable Liquids</b>	An approved flammable storage cabinet Peroxide-forming chemicals must be dated upon delivery and opening (See Peroxide Handling Guidelines on RMS website)	Ethanol, Methanol, Acetone, Xylene, Toluene, Diethyl Ether, Tetrahydrofuran	Acids, bases, oxidizers
<b>Flammable Solids</b>	Cool dry area away from oxidizers and corrosives	Paraformaldehyde	Acids, bases, oxidizers
<b>Water Reactive Chemicals</b>	Store in a cool dry location. Protect from fire Sprinkler system and other sources of water. Label area for water-reactive storage.	Sodium metal Lithium metal Potassium Metal, Metal hydrides Sodium Borohydride	Aqueous solutions, oxidizers, water sources. Consult SDS sheets or RMS for chemical and /or process specific info
<b>Oxidizers</b>	Store in secondary containment with non-combustibles	Perchlorates, Nitrates Permanganates,	Flammables, combustibles organic materials
<b>Toxic Chemicals (Poisons)</b>	In a ventilated, dry, cool area in a chemically resistant secondary container	Chloroform, Cyanides, Heavy Metals such as Cadmium, Mercury	Flammable liquids, acids, bases, reactive, oxidizers
<b>Non-hazardous / General stock chemicals</b>	Storage on laboratory benches, or shelves with like Chemicals. Use upper shelves for non-hazardous chemicals	Sodium bicarbonate, Agar, Salt buffers	Consult chemical specific SDS sheets

**Contact RMS at 334-740 9711 OR 334-740-9798 for more information**

**Web: [www.auburn.edu/RMS](http://www.auburn.edu/RMS)**