

Basic Chemical Segregation

| CLASS OF CHEMICALS | RECOMMENDED STORAGE METHOD | EXAMPLES | INCOMPATIBILITIES SEE MSDS IN ALL CASES |
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| Compressed Gases- Flammable | 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. |
| Compressed Gases- Oxidizing | Store in a cool, dry area, away from flammable gases and liquids. Securely strap or chain cylinders to a wall or bench. | Oxygen, chlorine, bromine | Flammable gases. |
| Compressed Gases- Poisonous | Store in a cool, dry area, away from flammable gases and liquids. Securely strap or chain cylinders to a wall or bench. | Carbon monoxide, hydrogen sulphide (H ₂ S) | Flammable and/or oxidizing gases. |
| Corrosives - Acids | Store in separate acid storage cabinet. | Mineral acids - Hydrochloric acid, sulfuric acid, nitric acid, perchloric acid, chromic acid, chromerge | Flammable liquids, flammable solids, bases, oxidizers. |
| Corrosives - Bases | Store in separate storage cabinet. | Ammonium hydroxide, sodium hydroxide | Flammable liquids, oxidizers, poisons, and acids. |
| Shock Sensitive Materials | Store in secure location away from all other chemicals. | Ammonium nitrate, Nitro Urea, Picric Acid (in dry state), Trinitroaniline, Trinitroanisole, Trinitrobenzene, Trinitrobenzenesulfonic acid, Trinitrobenzoic acid, Trinitrochlorobenzene, Trinitrophenol/Picric acid, trinitrotoluene, Urea Nitrate, Zirconium picramate | Flammable liquids, oxidizers, poisons, acids, and bases. |
| Flammable Liquids | In grounded flammable storage cabinet. | Acetone, benzene, diethyl ether, methanol, ethanol, toluene, glacial acetic acid | Acids, bases, oxidizers, and poisons. |
| Flammable Solids | Store in a separate dry, cool area away from oxidizers, corrosives, flammable liquids. | Phosphorus | Acids, bases, oxidizers, and poisons. |
| General Chemicals Non-reactive | Store on general laboratory benches or shelving preferably behind glass doors, or | Agar, sodium chloride, sodium bicarbonate, and most non-reactive salts | See MSDS |

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| | below eye level. | | |
| Oxidizers | Store in a spill tray inside a noncombustible 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. |
| Poisons | Store separately in vented, cool, dry, area, in unbreakable chemically resistant secondary containers. | Cyanides, heavy metals compounds, i.e. cadmium, mercury, osmium | Flammable liquids, acids, bases, and oxidizers. |
| Water Reactive Chemicals | Store in dry, cool, location, protect from water fire sprinkler. | Sodium metal, potassium metal, lithium metal, lithium aluminum hydride | Separate from all aqueous solutions, and oxidizers. |
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