

CHEMICAL STORAGE GUIDELINES

The following information is designed to aid in proper chemical storage in the HIM/NRB laboratories. Chemicals are to be stored according to the following hazard classes. Storing all classes together alphabetically is prohibited. Chemicals may be organized alphabetically once they are segregated according to hazard class.



Oxidizers – Incompatible with **flammables** and organics.
Common Oxidizers – Ammonium Persulfate, Silver Nitrate, Silver Nitrite, Hydrogen Peroxide, Potassium Permanganate, Sodium Dichromate



Toxic – Poisons
Common Toxics – Arsenic compounds, Cyanides, Osmium Tetroxide, Formaldehyde, Formalin, Naphthalene, Chloroform, Acrylamide



Flammables – Incompatible with **oxidizers**. Ignitable/Flammable chemicals must be stored in a **flammable cabinet**. Flammable chemicals requiring refrigeration must be stored in a refrigerator rated for flammable storage.
Common Flammables – Ethanol, Methanol, Acetone, Benzene, Ethyl Acetate, Butanol, Alcohols, Furans, Toluene, Sigmacote, TEMED, Paraformaldehyde (flammable solid)



Corrosive – 3 kinds of Corrosives: **Bases, Organic Acids, and Inorganic Acids**. All 3 of these corrosives have this pictogram, however must be separated from each other.
Common Bases – Sodium Hydroxide, Potassium Hydroxide, Developer
Common Organic Acids – Acetic Acid, Glacial Acetic Acid, Phenol, Formic Acid
Common Inorganic Acids – Sulfuric Acid, Hydrochloric Acid, Perchloric Acid, Nitric Acid, Chromic Acid

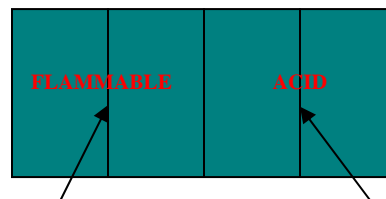


Irritants – chemicals producing irritation. Often times the majority of chemicals in a dry chemical storage area in HIM/NRB laboratories
Common Irritants – Sodium Carbonate, Sodium Bicarbonate, Trizma, Putrescine, Antifoam.

Chemical Storage Shelving Example

Irritants
Oxidizers
Toxic
Corrosive

Chemical Fume Hood Cabinet



Flammable Storage

Corrosive Storage – Segregate inorganic acids, organic acids, and bases