

Storage Pattern for Chemicals Where Space is Limited

Inorganic Reactives & Metals (I-1, I-10) Sulfur, Phosphorus, Arsenic, Metals, Hydrides (Store away from any water.)	Organic Toxins (O-5, O-7) Epoxy Compounds, Isocyanates, Sulfides, Polysulfides
Inorganic Salts (I-2) Halides, Sulfates, Sulfites Thiosulfates, Phosphates, etc.	Organic Reactives #6 Peroxides, Azides, etc.
Inorganic Oxidizers (I-3, I-6, I-8) Nitrates, Nitrites, Borates, Chromates, Manganates, Permanganates, Chlorates, Chlorites, Peroxides	Flammable Storage Cabinet (O-2, O-3, O-4, O-8 & concentrated organic bases) Alcohols, Glycols, Phenol, Hydrocarbons, Cresols, Esters, Ethers, Propionic Acid, Formic Acid, Glacial Acetic Acid, Lactic Acid
Inorganic Corrosive Bases (O-4) (Dry Chemicals) Dry Hydroxides, Oxides Silicates, etc.	Dry and Dilute Organic Acids & Anhydrides (O-1) Citric Acid, Anhydrides, Peracids, etc.
Inorganic #5 and #7 Arsenates, Cyanides, Sulfides, Selenides, Phosphides, Carbides, Nitrides, etc.	Miscellaneous Household chemicals (vinegar, baking soda, vegetable oils), Dyes, Stains, Agars, Sugars, Gels
Corrosive Base Storage Cabinet Liquid Hydroxides, Oxides Silicates, etc.	Corrosive Acid Storage Cabinet Inorganic Acids, Nitric acid separately stored

Short List of Incompatible Chemicals

ALKALI METALS (Ca, K, Na, Li) with: water, carbon dioxide, chlorinated hydrocarbons.	ACETIC ACID with: nitric & sulfuric acid, perchloric acid, peroxides & permanganates.
AMMONIUM NITRATE with: acids, metal powders, flammable liquids, chlorates, nitrates, sulfur, and finely divided organics or combustibles.	ACETYLENE with: copper (tubing), fluorine, bromine, chlorine, iodine, silver, mercury, or their compounds.
AMMONIUM HYDROXIDE with: bleach, calcium hypochlorite, acids.	ACETONE with: concentrated sulfuric acid and nitric acid mixtures.

CHLORATES	CYANIDES
with: ammonium salts, acids, metal powders, sulfur, carbon, combustibles.	with: acids.
CHLORINE	BROMINE
with: ammonia, acetylene, benzene & other petroleum substances, hydrogen, turpentine, and finely divided metals.	with: ammonia, acetylene, butadiene, butane, hydrogen, sodium carbide, turpentine, or finely divided metals.
HYDROGEN PEROXIDE (>8%)	NITRIC ACID
with: copper, chromium, iron, most metals or their respective salts, flammable liquids and other combustible materials.	with: acetic or organic acids, carbon, flammable liquids, other organics.
HYDROCARBONS	IODINE
with: chlorine, bromine, chromic acid, or sodium peroxide.	with: acetylene or ammonia.
MERCURY	OXALIC ACID
with: acetylene, fulminic acid, or hydrogen.	with: silver or mercury
SULFURIC ACID	POTASSIUM PERMANGANATE
with: chlorates, perchlorates, permanganates, and water	with: glycerine, ethylene glycol, benzaldehyde, or sulfuric acid.