

COMPATIBLE STORAGE GROUP GUIDE

Effective segregation in chemical storage reduces the risk of dangerous chemical reactions.

This guide must be used in conjunction with information from the manufacturer's safety data sheets and chemical-specific expert knowledge.

This storage group system is intended to be used in research settings to store laboratory-scale quantities of chemicals.

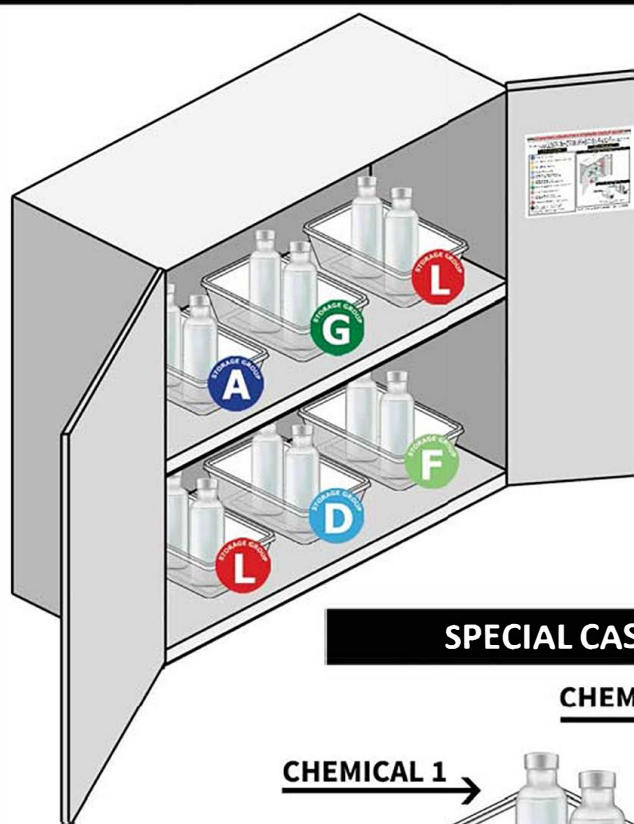
What to Segregate

- A** Compatible Organic Bases
- B** Compatible Pyrophoric & Water-Reactive Materials *
- C** Compatible Inorganic Bases
- D** Compatible Organic Acids
- E** Compatible Oxidizers & Peroxides (not including Strong, Oxidizing Acids) *
- F** Compatible Inorganic Acids (not including Oxidizers or Combustibles)
- G** Not Inherently Reactive, Flammable, or Combustible
- I** Compatible Strong, Oxidizing Acids
- K** Compatible Stable Explosives (not including Oxidizing Explosives) *
- L** Flammables, Combustibles, & Organic Solvents
- X** Incompatible with ALL Other Chemicals (including other chemicals within X) *

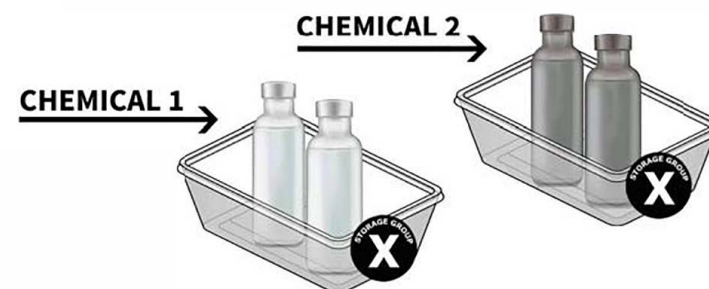
* These materials are likely to require special handling & storage conditions. Use extreme caution.

How to Segregate

USE SEPARATE SECONDARY CONTAINERS FOR EACH GROUP



SPECIAL CASE FOR GROUP X



NOTE: Different chemicals within Storage Group X must be segregated from each other.

Questions? Contact EH&S at 326-2756

Recommended Storage Groups for Common Chemicals

| CHEMICAL | Group | | | | |
|--|--------------|---|---|---|---|
| 1-Butanol or 2-butanol | L | Ethyl acetate | L | Pump oil | L |
| 1-Propanol | L | Ethylene glycol | L | Pyridine | A |
| 2-Mercaptoethanol | L | Ficoll | G | SDS (Sodium dodecyl sulfate) (in solution: G) | L |
| Acetic acid, glacial (flammable) | D | Formaldehyde | L | Sigmacote | L |
| Acetic anhydride | L | Formamide | L | Sodium acetate | G |
| Acetone | L | Formic Acid (88%) | D | Sodium azide (in solution: G) | X |
| Acetonitrile | L | Glutaraldehyde | G | Sodium bicarbonate | G |
| Acetaldehyde | L | Glycerol | L | Sodium bisulfate | G |
| Acrolein | L | Glycine | G | Sodium bisulfite | G |
| Acrylamide | G | Guanidine hydrochloride | G | Sodium borate | G |
| Agarose | G | Guanidinium thiocyanate | C | Sodium borohydride | B |
| Ammonium acetate | G | Halothane, isoflurane | G | Sodium carbonate | G |
| Ammonium chloride | G | HEPES | G | Sodium chlorate | E |
| Ammonium formate | G | Hexanes | L | Sodium chlorate (NaCl) | G |
| Ammonium hydroxide | C | Hydrochloric acid | F | Sodium citrate dihydrate | G |
| Ammonium nitrate | E | Hydrogen peroxide, > 5% | E | Sodium dichromate | E |
| Ammonium persulfate | E | Hydrogen peroxide, < 5% | G | Sodium dichromate dihydrate | E |
| Ammonium sulfate | G | Imidazole | A | Sodium hydroxide (NaOH) | C |
| Ammonium sulfide | L | Isobutyl alcohol | L | Sodium hypochlorite | E |
| Benzene | L | Isopentane | L | Sodium hypochlorite solution (i.e. bleach) | E |
| BIS/Bis-acrylamide | G | Isopropanol | L | Sodium phosphate | G |
| BIS-TRIS | A | Magnesium chloride | G | Sodium sulfide, anhydrous | B |
| Borax | G | Magnesium sulfate | G | Succinic acid | D |
| Boric acid | G | Maleic acid | D | Sucrose | G |
| Calcium chloride | G | Methanol | L | Sulfuric acid | I |
| Carbenicillin | G | <i>N</i> -Methyl-2-pyrrolidone | L | Tannic acid | D |
| Chloroform | G | <i>N,N</i> -Dimethylformamide | L | TEMED | A |
| Chromic acid | I | Nitric acid | I | TES free acid | G |
| Citric acid | D | <i>p</i> -Dioxane | L | Tetracycline | G |
| Coomassie Blue | G | Paraformaldehyde | L | Tetrahydrofuran | L |
| Dextrose | G | Perchloric acid | I | Trichloroacetic acid | D |
| Dichloromethane | G | Periodic acid | I | Trifluoroacetic acid | D |
| Diethylamine (flammable) | A | Permout | L | Toluene | L |
| Diethyl pyrocarbonate (DEPC) | L | Phenol (solid) | G | Triethanolamine | A |
| Dimethyl sulfoxide (DMSO) | L | Phenol (liquid, ≤ 89% phenol) | L | TRIS | A |
| Drierite | G | Phosphoric acid | F | Triton X-100 | G |
| EcoLume, UniverSOL, BetaMax, CytoScint, Scintisafe, Econo-Safe, Ecoscint, Opti-fluor | L | Picric acid (any concentration) | X | Trizol | L |
| EDTA (in solution: G) | D | Piperidine | A | TWEEN 20 | G |
| Ethanol | L | PIPES, free acid | G | Urea | G |
| Ethanolamine | A | Potassium acetate | G | WD-40 | L |
| Ethers | L | Potassium chloride | G | Xylenes | L |
| Ethidium bromide | G | Potassium cyanide | C | Zinc chloride | G |
| | | Potassium hydroxide (KOH) | C | | |
| | | Potassium phosphate (K ₃ PO ₄) | G | | |
| | | Propionic acid | D | | |
| | | Propylene oxide | L | | |