STANFORD 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.

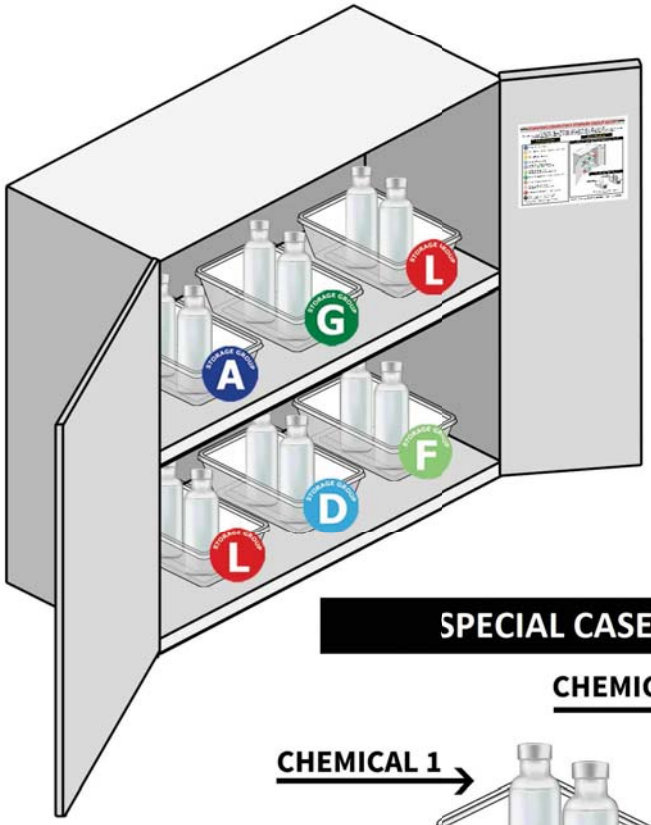
What to Segregate

- **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 Intrinsically 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 the EH&S Lab Safety Program at 723-0448
Use ChemTracker to find a chemical's Storage Group - stanford.chemtracker.org

Recommended Storage Groups for Common Chemicals

CHEMICAL	Group
1-Butanol or 2-butanol	L
1-Propanol	L
2-Mercaptoethanol	L
Acetic acid, glacial (flammable)	D
Acetic anhydride	L
Acetone	L
Acetonitrile	L
Acetaldehyde	L
Acrolein	L
Acrylamide	G
Agarose	G
Ammonium acetate	G
Ammonium chloride	G
Ammonium formate	G
Ammonium hydroxide	C
Ammonium nitrate	E
Ammonium persulfate	E
Ammonium sulfate	G
Ammonium sulfide	L
Benzene	L
BIS/Bis-acrylamide	G
BIS-TRIS	A
Borax	G
Boric acid	G
Calcium chloride	G
Carbenicillin	G
Chloroform	G
Chromic acid	I
Citric acid	D
Coomassie Blue	G
Dextrose	G
Dichloromethane	G
Diethylamine (flammable)	A
Diethyl pyrocarbonate (DEPC)	L
Dimethyl sulfoxide (DMSO)	L
Drierite	G
EcoLume, UniverSOL, BetaMax, CytoScint, Scintisafe, Econo-Safe, Ecoscint, Opti-fluor	L
EDTA (in solution: G)	D
Ethanol	L
Ethanolamine	A
Ethers	L
Ethidium bromide	G
Ethyl acetate	L
Ethylene glycol	L
Ficoll	G
Formaldehyde	L
Formamide	L
Formic Acid (88%)	D
Glutaraldehyde	G
Glycerol	L
Glycine	G
Guanidine hydrochloride	G
Guanidinium thiocyanate	C
Halothane, isoflurane	G
HEPES	G
Hexanes	L
Hydrochloric acid	F
Hydrogen peroxide, > 5%	E
Hydrogen peroxide, < 5%	G
Imidazole	A
Isobutyl alcohol	L
Isopentane	L
Isopropanol	L
Magnesium chloride	G
Magnesium sulfate	G
Maleic acid	D
Methanol	L
N-Methyl-2-pyrrolidone	L
N,*N*-Dimethylformamide	L
Nitric acid	I
p-Dioxane	L
Paraformaldehyde	L
Perchloric acid	I
Periodic acid	I
Permount	L
Phenol (solid)	G
Phenol (liquid, ≤ 89% phenol)	L
Phosphoric acid	F
Picric acid (any concentration)	X
Piperidine	A
PIPES, free acid	G
Potassium acetate	G
Potassium chloride	G
Potassium cyanide	C
Potassium hydroxide (KOH)	C
Potassium phosphate (K_3PO_4)	G
Propionic acid	D
Propylene oxide	L
Pump oil	L
Pyridine	A
SDS (Sodium dodecyl sulfate) (in solution: G)	L
Sigmacote	L
Sodium acetate	G
Sodium azide (in solution: G)	X
Sodium bicarbonate	G
Sodium bisulfate	G
Sodium bisulfite	G
Sodium borate	G
Sodium borohydride	B
Sodium carbonate	G
Sodium chlorate	E
Sodium chloride (NaCl)	G
Sodium citrate dihydrate	G
Sodium dichromate dihydrate	E
Sodium hydroxide (NaOH)	C
Sodium hypochlorite	E
Sodium hypochlorite solution (i.e. bleach)	E
Sodium phosphate	G
Sodium sulfide, anhydrous	B
Succinic acid	D
Sucrose	G
Sulfuric acid	I
Tannic acid	D
TEMED	A
TES free acid	G
Tetracycline	G
Tetrahydrofuran	L
Trichloroacetic acid	D
Trifluoroacetic acid	D
Toluene	L
Triethanolamine	A
TRIS	A
Triton X-100	G
Trizol	L
TWEEN 20	G
Urea	G
WD-40	L
Xylenes	L
Zinc chloride	G

See other side for information about the Stanford Storage Group System. Storage Groups are continuously reviewed and updated as needed. If you have any questions or suggested changes, please contact EH&S at 723-0448.