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 (in THF or acetone: L)	X
Acetone	L
Acetonitrile	L
Acetaldehyde	L
Acrolein	X
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
Benzyl chloride	B
Benzoic acid	D
BIS/Bis-acrylamide	G
BIS-TRIS	A
BIS-TRIS-HCl	G
Borax	G
Boric acid	G
Calcium chloride	G
Chloroform	G
Chromic acid	I
Citric acid	D
Coomassie Blue	G
Dextrose	G
Dichloromethane	L
Diethylamine (flammable)	A
Diethyl pyrocarbonate (DEPC)	L
Dimethyl sulfoxide (DMSO)	L
Drierite	G
Econo-Safe, UniverSOL, BetaMax, CytoScint, Scintisafe, EcoLume, 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 (≥85%)	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
Lithium hydroxide	C
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	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	G
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

This Storage Group System was created by Stanford University.
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 the University of Hawaii EHSO at 808-956-5097.

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.

STORAGE GROUPS

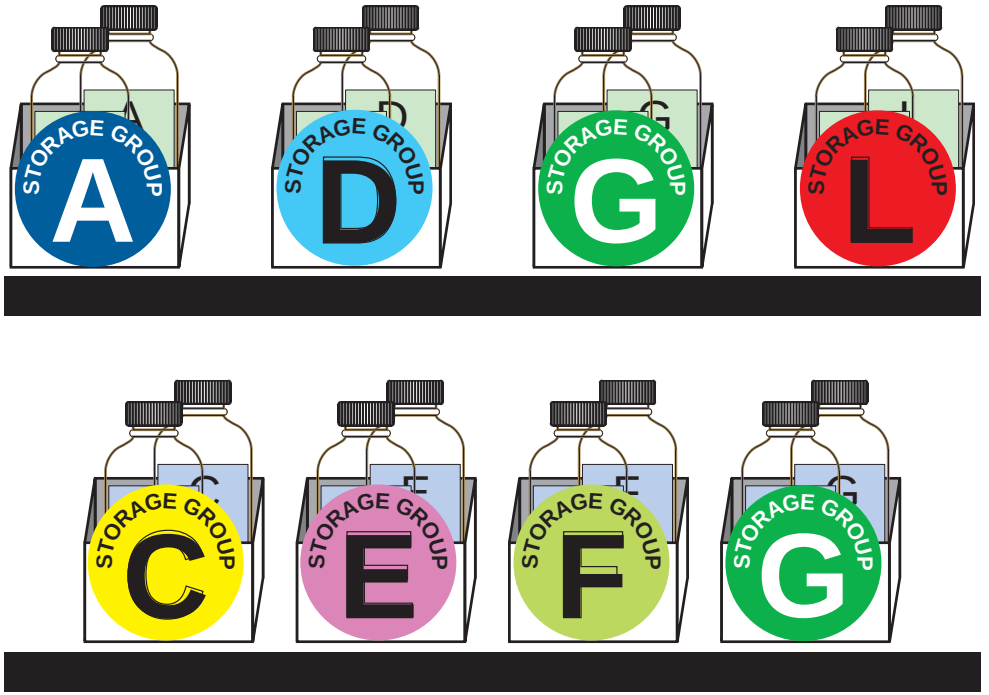
Store chemicals in separate secondary containment and cabinets

A	Compatible Organic Bases
B	Combatible 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 Combustibes)
G	Not Intrinsically Reactive, Flammable, or Combustible
I	Compatible Strong, Oxidizing Acids
J	Poison Compressed Gases*
K	Compatible Stable Explosives* (not including Oxidizing Explosives)
L	Flammables, Combustibles, & Organic Solvents
X	Incompatible with ALL Other Chemicals* (including other Chemicals within X)

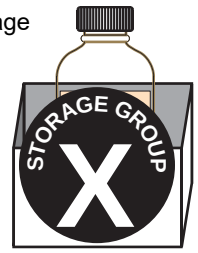
* Contact UH EHSO @ 808-956-5097 or email at labsafe@hawaii.edu

* Special handling and storage requirements - Consult manufacturer's SDS

If space does not allow Storage Groups to be kept in separate cabinets the following scheme can be used with extra care taken to provide stable, uncrowded, and carefully monitored conditions.



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



Storage Group X must be segregated from all other chemicals.

Storage Group B is not compatible with any other storage group.

Last updated 03/19/19

Storage Group Classification System created by Stanford University