

# Chemical Storage

## Storage Group

### Examples

- A** Compatible Organic Bases
- B** Compatible Pyrophoric & Water Reactive Materials
- C** Compatible Inorganic Bases
- D** Compatible Organic Acids
- E** Compatible Oxidizers, including Peroxides
- F** Compatible Inorganic Acids, not including Oxidizers or Combustibles
- G** Not Intrinsically Reactive or Flammable or Combustible
- J\*** Poison Compressed Gases
- K\*** Compatible Explosive or other highly Unstable Materials
- L** Non-Reactive Flammables and Combustibles, including solvents
- X\*** Incompatible with ALL other storage groups

	FLAMMABLE LIQUIDS	OXIDIZERS	ORGANIC ACIDS	INORGANIC ACIDS	BASES	WATER REACTIVES	AQUEOUS SOLUTIONS	CYANIDES
FLAMMABLE LIQUIDS		X		X				
OXIDIZERS	X		X					
ORGANIC ACIDS		X		X	X	X		X
INORGANIC ACIDS	X		X		X	X		X
BASES			X	X				
WATER REACTIVES			X	X			X	
AQUEOUS SOLUTIONS						X		X
CYANIDES			X	X			X	

The green boxes mean the chemicals are compatible.

The red Xs mean that the chemicals are not compatible and need to be separated.

The blank boxes mean that you need to request help from a safety staff.

- **DO NOT** store hazardous chemicals or liquids above eye-level (about 6 ft.).
- **DO NOT** store hazardous chemicals on the floor, in sinks, benchtops, or in chemical fume hoods.
- **DO NOT** store hazardous materials in offices, classrooms, or break areas.
- **ALWAYS** use secondary containment. Secondary container volume needs to be 110% of the primary container(s). Safety staff can consult about multiple-container storage exemptions and rules for rooms with fire sprinklers.

You can keep your chemical inventory current using “RSS Chemicals” app or <https://ehs.ucop.edu/chemicals/>

- Hazardous material storage cabinets, fridges, & freezers must be approved through [Fixtures, Furniture, & Equipment Permit](#) before purchase/donation & installation.
- When ordering a chemical for the first time, submit a [Chemical Procurement Request Form](#) to confirm your storage is sufficient.

## Need Help?

- Ask the lab/shop supervisor
- Ask the department/college safety staff
- Ask SJSU Environmental Health & Safety
  - Chemical Hygiene Officer: [skye.kelty@sjsu.edu](mailto:skye.kelty@sjsu.edu); 408-924-1978
  - Director: [ehs@sjsu.edu](mailto:ehs@sjsu.edu); 408-924-1969

## **Relevant EHS Programs**

<https://www.sjsu.edu/fdo/services/ehs/index.php>

- SJSU Chemical Hygiene Plan: [https://www.sjsu.edu/fdo/services/ehs/ehs-docs/lab-safety/Chemical\\_Hygiene\\_Plan.pdf](https://www.sjsu.edu/fdo/services/ehs/ehs-docs/lab-safety/Chemical_Hygiene_Plan.pdf)
- SJSU Standard Operating Procedures for various chemical classes: [https://drive.google.com/drive/folders/12GN0zDIMXDckdpHNvrvJnSwodXnFkYMF?usp=drive\\_link](https://drive.google.com/drive/folders/12GN0zDIMXDckdpHNvrvJnSwodXnFkYMF?usp=drive_link)
- SJSU Chemical Procurement forms: <https://app.docusign.com/templates> then search for “EH&S Chemical Procurement Request Form” within all SJSU templates. You can save this as a favorite for future use.
- SJSU Fixture, Furniture, & Equipment Permit: <https://www.sjsu.edu/fdo/request-forms/resources.php>

## **Helpful Resources**

- Chapter: 4 Evaluating Hazards and Assessing Risks in the Laboratory. National Academies of Sciences, Engineering, and Medicine. 2011. Prudent Practices in the Laboratory: Handling and Management of Chemical Hazards, Updated Version. Washington, DC: The National Academies Press. <https://doi.org/10.17226/12654>. <https://nap.nationalacademies.org/read/12654/chapter/6>
- Princeton University Chemical Compatibility codes: <https://ehs.princeton.edu/sites/ehs/files/Chemical%20Compatibility%20Storage%20Codes%20-%20redacted.pdf>
- School Chemistry Laboratory Safety Guide, October 2006, DHHS (NIOSH) Publication No. 2007–107. <https://www.cdc.gov/niosh/docs/2007-107/pdfs/2007-107.pdf?id=10.26616/NIOSH PUB2007107>