CLEMSON
RESEARCH SAFETY

Hazardous Materials

What is a Hazardous Material?

A hazardous material is any biological, chemical, or physical material with properties that make it dangerous or potentially harmful to human health or the environment.

Always use required PPE when handling hazardous materials. Refer to Safety Data Sheets & Chemical SOPs/SASPs for PPE information

Friendly Reminders

- Lab staff should ensure that stock chemicals and other hazardous materials are stored properly in order to prevent spills, uncontrolled reactions and minimize worker exposures.
- A chemical inventory consisting of names, storage locations, quantities and hazards should be prepared and maintained in each lab and storage area.

Storage Guidelines

Hazardous Materials storage inside labs should be limited to those chemicals and quantities necessary to complete task requirements.

Storage Dos:

- Segregate according to hazard class & compatibility (i.e. acids from bases; oxidizers from organics/flammables; cyanides from acids)
- Must be labeled in accordance with the OSHA Laboratory Standard.
- Toxic chemicals must be stored separately from all other chemicals & in closed cabinets. Cabinets must be labeled "Toxic Chemicals" or with similar warnings.
- Use secondary containment, such as acid carriers, when transporting liquid chemicals more than a very short distance.
- Flammable & combustible materials must be stored in accordance with NFPA 45 & NFPA 30
- Must be closed when not in use.
- Must be maintained per manufacturer requirements.

Storage Don'ts:

- Hazardous Materials must not be stored:
  - On Floors
  - Under Sinks
  - In Chemical Fume Hoods
  - On Benches without lips or restraining devise
  - Above Eye Level

Other Resources

Research Safety Website

*Please visit the **Lab Safety** section of the RS website for more information.*