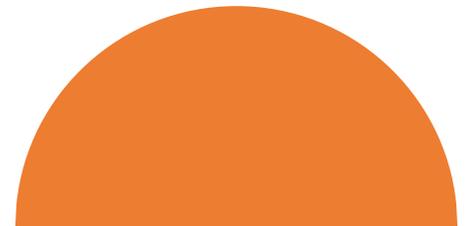
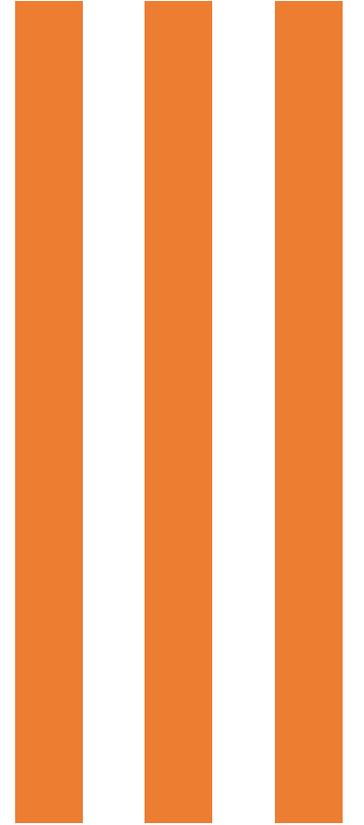
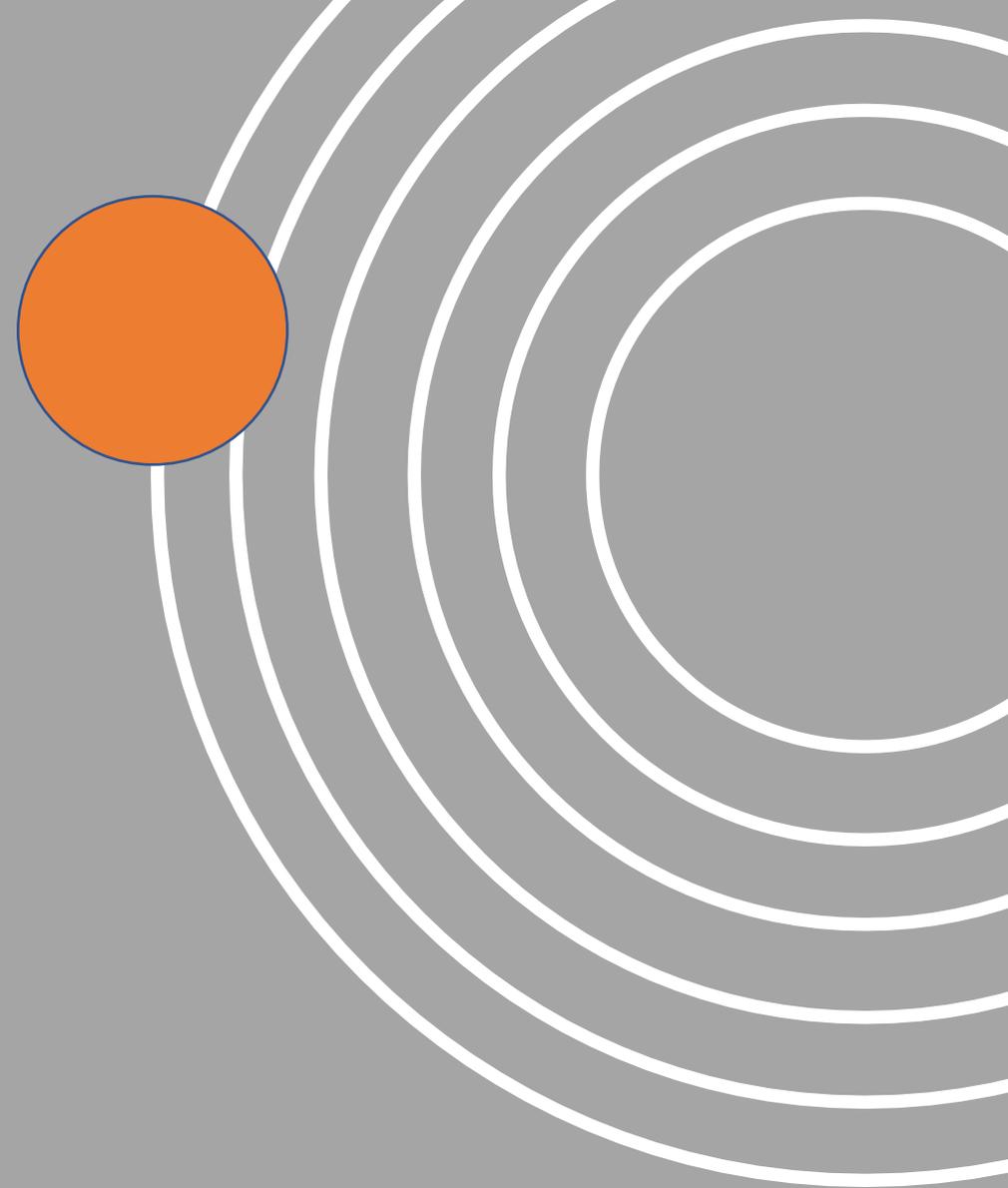


Chemical Safety for OFTC Students



Stay Safe:

Your Guide to Chemical Safety in the Lab



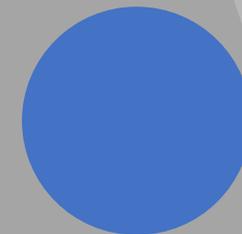
Why Chemical Safety Matters

Chemicals can be hazardous if mishandled (e.g., burns, explosions, toxic fumes).

Real-world example: A small lab spill can lead to injury or evacuation.

Goal: Protect yourself, classmates, and the environment.

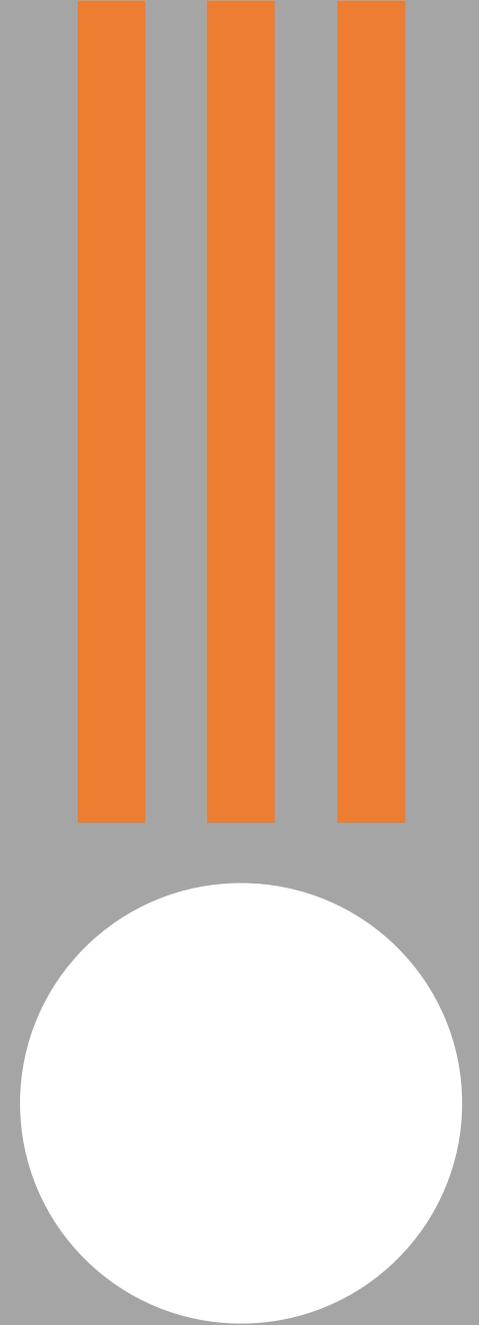
80% of lab accidents are preventable with proper safety



Warning Label

“Have you ever seen a warning label on a household chemical?”

Why do you think it’s there?”





- Know Your Hazards

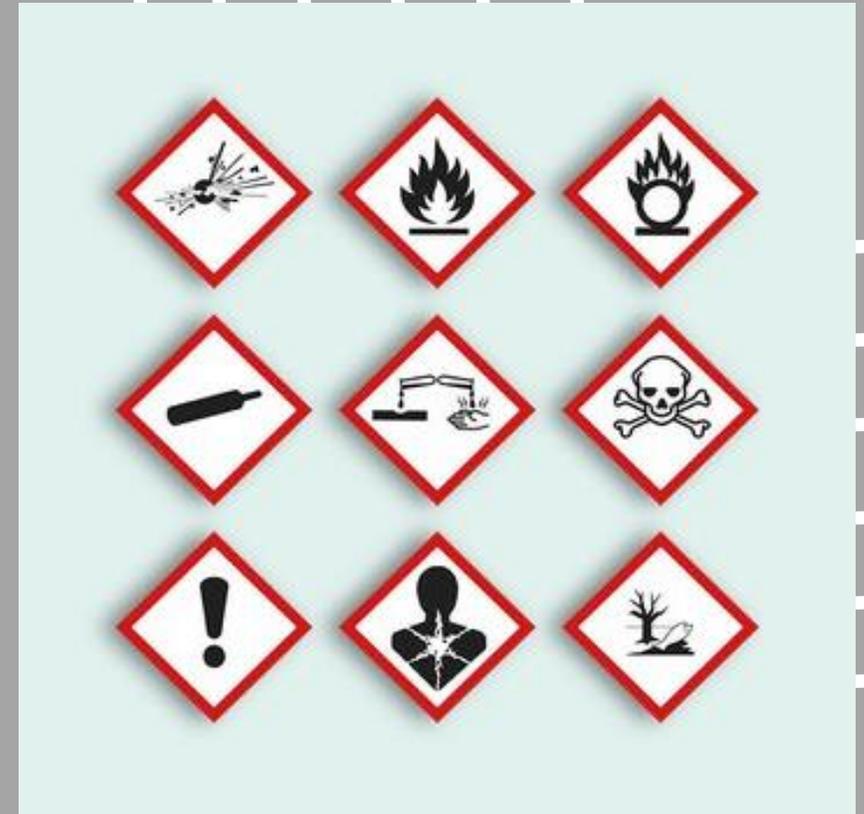
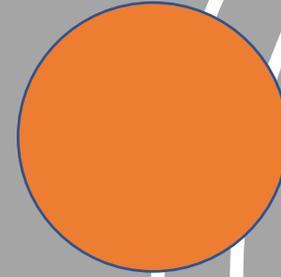
Types of Hazards:

- Flammable (e.g., Gasoline, ethanol)
- Corrosive (e.g., hydrochloric acid)
- Toxic (e.g., ammonia)
- Reactive (e.g., sodium with water)

Look for hazard symbols on containers (e.g., skull, flame, corrosion).

Visual

Hazard pictograms
(GHS symbols) with labels.

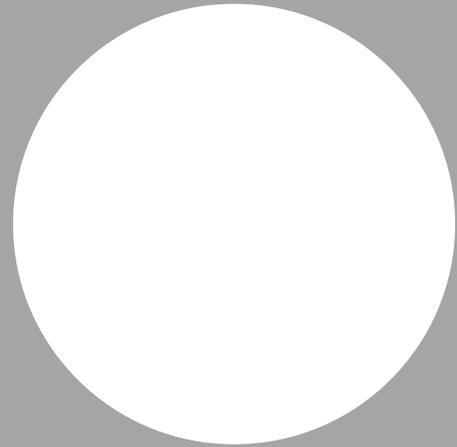


Personal Protective Equipment (PPE)

- Always wear:
- Safety goggles (protect eyes from splashes).
- Lab coat or apron (protect skin and clothing).
- Gloves (choose the right type for the chemical).
- Closed-toe shoes (no sandals).
- Check PPE for damage before use.



Safe Handling of Chemicals



1. Do:

- Read labels and Safety Data Sheets (SDS) before starting.
- Use small quantities to minimize risk.
- Work in a fume hood for volatile chemicals.

1. Don't:

- Never mix chemicals unless instructed.
- Never smell or taste chemicals.
- Avoid horseplay in the lab.

Emergency Procedures

Spills: Notify the instructor, evacuate if necessary, use spill kits.

Fire: Use fire extinguisher (PASS: Pull, Aim, Squeeze, Sweep) or evacuate.

Exposure: Rinse eyes/skin at eyewash station or safety shower for 15 minutes.

Evacuation: Know exit routes and assembly points.



Lab Etiquette and Teamwork

- Clean up spills immediately (with instructor guidance).
- Communicate with classmates about hazards.
- Report unsafe behavior or broken equipment to the instructor.

Safety is a team effort

Key Takeaways

Know where to locate SDS sheets.

They are found on OFTC Website. (OFTC.edu)

Go to Quick Links > Open Safety & Security Link > Open MSDS Online link >

Enter Chemical in the Search Tab

Always read container labels and use appropriate PPE

Handle, store, and dispose of chemicals responsibly

