

Chemistry Department Laboratory Safety Rules

The Chemistry Department is committed to providing a safe environment for students and staff. However, laboratory safety is a mutual responsibility and requires full participation and cooperation of all involved - students, TAs and instructors. The following lab safety rules have been established for your protection as a student in the Chemistry Department. These rules will be rigidly and impartially enforced. Noncompliance may result in a grading penalty and/or dismissal from lab. A statement of agreement to compliance with the lab rules is included on the lab check-in sheet and must be signed prior to beginning lab.

Personal Protective Equipment (PPE)

- Safety Goggles must be worn at all times in active chemistry labs. The goggles must be indirectly vented and meet ANSI Z87.1 requirements for impact and splash protection. Appropriate goggles are available at the bookstore. Safety glasses are not acceptable. Do not alter the goggles in any way.
- Wearing contact lenses in a chemistry lab can potentially be hazardous given certain circumstances, therefore avoid wearing contact lenses in a chemistry lab. If you choose to wear contacts, write "Contact Lens Wearer" next to your name on your lab check in sheet.
- Appropriate gloves will be provided when needed. Gloves only provide temporary protection in case of chemical contact. Take care to minimize all chemical contact with gloves. Gloves should be replaced when contaminated.
- Remove gloves before exiting the lab. Wash hands after removing gloves and before leaving the lab.
- Your clothing is a barrier between your skin and chemical hazards. You must, at a minimum, wear long pants or long skirt, a full coverage shirt, full length socks, and closed toed shoes. There must be no exposed skin below your collar bone.
- A lab coat is required during active teaching labs. Lab coats must be buttoned and sleeves rolled down. Lab coats may be purchased at the bookstore.

General Lab Rules

- Do not eat, drink, or store food in labs.
- Tobacco products and electronic cigarette devices are prohibited.
- Being under the influence of alcohol or marijuana while in lab is prohibited.
- Do not taste chemicals. Check chemical odors by wafting only when directed by instructor.
- Unsupervised laboratory work is not permitted. Do not perform unauthorized experiments.
- Review Safety Data Sheets (SDS) before working with chemicals. SDS are available outside SCIE 311.
- Handle chemicals carefully.
- Dispose of chemicals as instructed. Do not dispose of chemicals down the sink drain unless instructed.
- Leave the lab area clean.
- Cell phones should be turned off while in lab.
- Lab computers are for official lab work only.
- Long hair, necklaces, or loose clothing must be tied back or confined while in the lab.
- Never mouth pipette.
- No music allowed in student labs.
- No horseplay or running will be tolerated.

Specific Notes

- Students of reproductive age, especially women who are pregnant or planning on becoming pregnant, should discuss course content and reagents with their physician.
- If you have a medical condition that results in seizures, blackouts, or etc. resulting from epilepsy, diabetes, or etc., please inform your instructor who will direct you to the department safety representative. If you wish to seek accommodations due to any condition, please contact Disability Services at (509) 963-2214.

Hazard Recognition Pictograms



| NFWA Rating Explanation Guide | | | | | |
|-------------------------------|---|---|--|---------------|--|
| RATING NUMBER | HEALTH HAZARD | FLAMMABILITY HAZARD | INSTABILITY HAZARD | RATING SYMBOL | SPECIAL HAZARD |
| 4 | Can be lethal | Will vaporize and readily burn at normal temperatures | May explode at normal temperatures and pressures | ALK | Alkaline |
| 3 | Can cause serious or permanent injury | Can be ignited under almost all ambient temperatures | May explode at high temperature or shock | ACID | Acidic |
| 2 | Can cause temporary incapacitation or residual injury | Must be heated or high ambient temperature to burn | Violent chemical change at high temperature or pressures | COR | Corrosive |
| 1 | Can cause significant irritation | Must be preheated before ignition can occur | Normally stable. High temperatures make unstable | OX | Oxidizing |
| 0 | No hazard | Will not burn | Stable | ☢ | Radioactive |
| | | | | ☹ | Reacts violently or explosively with water |
| | | | | ☹OX | Reacts violently or explosively with water and oxidizing |

NFWA Chart 1 www.complanet.org
This chart for reference only - For complete specifications consult the NFPA 704 Standard

Incident or Emergency Response

- In case of an emergency immediately call 9-1-1.
- Spills - Assess the situation and notify the instructor. Small low level hazard spills can be cleaned up with the help of the TA using the spill kit in the prep room. If the spill is flammable, shut gas off immediately.
- Glass Breakage – DO NOT HANDLE broken glass with bare hands, consult TA or instructor on how to clean-up. Put the broken glass in the Broken Glass Container – not in the trashcan. Fill out a breakage slip and place it the box in the prep room. The TA will use the mercury spill kit to clean up thermometers – never put them in the trashcan.
- Personal Injury – all injuries and near misses must be reported regardless of severity.
 Minor injuries may be treated as follows:
 - Cuts – Rinse with water. Band-Aids are available from your TA.
 - Thermal Burns – Flush with cold water. Do not cover, Report to your instructor/ TA immediately.
 - Chemical Burns – Flush for 15 min. using sink, shower, or eyewash. Report to your instructor/ TA immediately.

Fill out a student accident report online. Form available via: <http://www.cwu.edu/~web/cwu-accident-report/>

- Power Outage – Await instructions. If power is not restored in 15 min., your TA will help you to begin shutting down the lab. Put all chemicals away. Turn off gas and electrical equipment. Pull hood sashes down.
- Fire Alarm Sounds – Indicates imminent danger. Close chemical containers, shut off gas and electricity, exit from labs down the stairwell– do not use elevators. Your instructor will provide specific information concerning the remainder of the lab and re-entry into the building. Faculty, staff and TAs will assemble on the lawn on the **Northside of the Japanese Garden**. DO NOT CLEAN UP OR PUT THINGS AWAY – EVACUATE IMMEDIATELY!

If you have any questions, the following people are your safety resources:

- your TA
- your Lab Instructor
- Chemistry Stockroom Manager – Tony Brown – SCIE 303, 963-1303
- Chemistry Department Safety Representative – Ian Seiler – SCIE 315, 509-607-1620
- Campus Safety – Kevin Dewitt – 963-2552

For additional department safety information visit the department safety web page at <http://www.cwu.edu/chemistry/laboratory-safety>