SAFETY
C.W.U. Chemistry Department
Teaching 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 Protection

- Safety Goggles must be worn at all times in active chemistry labs. This is the policy of Central Washington University and also a state requirement. The goggles must be of the indirect vented type and must meet ANSI Z87.1 specifications. The bookstore has approved goggles – safety glasses are not acceptable. Do not remove the plastic vent covers from the goggles.
- The safety of wearing contact lenses in chemical laboratories has been hotly debated over the last several years. Both the ACS and OSHA have issued statements indicating that contact lenses can be worn IF AND ONLY IF proper protective eyewear is also worn. The Chemistry Department recognizes that some eye conditions require contacts for certain vision correction therapies. However, students who choose to wear contacts must recognize the inherent risks – they are difficult to remove if chemicals get in the eye, they have a tendency to prevent natural eye fluids from removing contaminants, and sudden displacement can cause visual problems that create additional hazards. Soft contact lenses are especially problematic because they can discolor and also absorb chemical vapors causing damage before the wearer is alerted to the problem. If you choose to wear contacts, please tell your lab instructor and write “Contact Lenses Wearer” by your signature on your lab check-in form.
- Appropriate gloves will be provided when needed. Use of gloves is required for handling certain chemicals. Gloves are very expensive. Do not change gloves needlessly. Do not wear gloves outside the lab where they can contaminate doors and other surfaces contacted. Wash hands after removing gloves, before leaving the lab.
- Appropriate clothing is required. Your clothing is a barrier between your skin and chemicals. All skin from shoulders across the collar bone to toes must be completely covered (excluding hands). Lab coats are required during the teaching labs by everyone at all times. They can be purchased at the student book store or online. WAC 296-800-160 Code of Federal Regulations, Title 29 CFR, Part 1910, Subpart 1
- Shoes must be worn and must completely cover all parts of the feet. WAC 296-800-160 Code of Federal Regulations, Title 29 CFR, Part 1910, Subpart 1
- Long hair must be tied back.
- Do not eat, drink (including sport bottles), or store food in the labs.
- Smoking or use of other tobacco products is prohibited.
- Wash hands after working with chemicals.
- Never mouth pipette – use a pipette bulb.
- Do not taste chemicals. Check odors only if instructed by your Instructor- by wafting gently toward your nose with your hand.
- It is the recommendation of this department that all students of reproductive age, especially women who have recently conceived or are anticipating conception during the quarter, discuss the course content and reagents with their physician if concerned about reproductive toxins.
- For your safety, if you have a medical condition that results in seizures, blackouts, etc. (e.g., from epilepsy, diabetes) please inform your instructor who will direct you to the department safety representative. This information will be kept confidential. If you wish to seek accommodations due to a disability or to address functional limitations, please contact Disability Services at 509-963-2214.

General Lab Rules

- No horseplay or running. Keep aisles clear - push stools against the bench when not in use. Store backpacks in cubicles provided.
- No music allowed in student labs. Radios (including IPods) and other entertainment devices are not permitted.
- Read all instructions carefully and plan your work ahead of time. Understand the experiment and if in doubt, ask.
- Unsupervised laboratory work is not permitted. Do not perform unauthorized experiments.
- No personal phone calls are allowed on lab phones - public phones are available on the first floor, east side. Cell phones should be turned off while in lab.
Chemistry lab computers are for chemistry business only - no Internet surfing or checking email.

Handle chemicals carefully. Note the colored labels affixed to the bottles. The Chemistry Department follows the J.T. Baker Sa-T-Data™ labeling system.

Colors represent hazard classes as follows:

- Orange: Minimal hazard, general precautions
- Blue: Toxic
- Yellow: Reactive, unstable
- Yellow Stripe: Incompatible with other Yellows
- Red: Flammable
- Red Stripe: Incompatible with other Reds
- White: Corrosive, usually acids
- White Stripe: Incompatible with other Whites, usually bases

Treat chemicals with respect and understand the chemicals you are using. Material Safety Data Sheets (MSDSs) are available at the MSDS Workstation outside Room 311 and online. Do not remove the MSDSs from the binders; bring the binders to the Chem office (Room 302) to request a copy.

Dispose of waste chemicals in the appropriate labeled waste containers – never dispose of chemicals down the drain unless directed to do so by the lab instructor.

Leave the lab area clean. Put equipment and chemicals away, wipe off the bench top and clean the balance pans.

**JUST IN CASE......**

In case of an emergency, contact your TA and instructor immediately and be prepared as follows:

- **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. If any chemical is spilled on the skin or splashed in the eyes, remove all jewelry and contaminated clothing and flush the affected area with water for 15 min.

- **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 in 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. 
  
  *Minor* injuries may be treated as follow:
  - 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 (forms located in First Aid drawer) and return signed form to the Chemistry Stockroom (across from SCI 315).

- **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 North side 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
- the Chemistry Stockroom Manager – Tony Brown – SCI 303, 963-1303
- the Chemistry Department Safety Representative – Ian Seiler – SCI 315, 509-607-1620
- the campus Industrial Hygienist – James Hudson – 963-2338

For additional department safety information visit the department safety web page at [http://www.cwu.edu/chemistry/laboratory-safety](http://www.cwu.edu/chemistry/laboratory-safety)

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