

Chemical Use Guidelines

1. Laboratory Safety Manual: Ensure that a laboratory safety manual is maintained in the laboratory, inclusive of Standard Operating Procedures. Ensure that the manual is updated to reflect current procedures and personnel are trained on the contents. Download the most current version of the UW Lab Safety Manual:
<http://www.ehs.washington.edu/manuals/lsm/index.shtm>
2. Standard Operating Procedures (SOPs): Comprehensive SOPs must be in place for other processes in the laboratory involving the use of carcinogens, organ specific toxicants, reproductive hazards, and particularly hazardous chemicals. This will include any work with fixatives, anesthetics, alcohols, acids/bases, ethidium bromide.
 - a. Employees must be trained on SOPs prior to work.
 - b. Refer to Section 6 of the UW Laboratory Safety Manual for information on developing comprehensive SOPs and Appendix C of the Lab Safety Manual for blank and template SOPs.
3. Fume Hood Use: Fume hoods should be used when working with toxic compounds or compounds with a boiling point below 120°C. Please do any weighing, handling of the dry powder, reconstituting, and diluting in the fume hood. The EH&S online fume hood training is highly recommended and can be completed at the following link:
<http://www.ehs.washington.edu/psotrain/onlineclass.shtm>
4. Personal Protective Equipment: Laboratory coats, chemical resistant gloves and eye protection must be available for laboratory personnel handling hazardous chemicals. Safety goggles should be worn when there is an increased risk of splash/splatter. Contact EH&S at 221-7770 if you need assistance in the selection of PPE.
5. Training: PIs are responsible for providing documented laboratory specific safety training.
 - a. Ensure that staff receives hazardous chemical training for hazardous chemicals used in your laboratory as part of the laboratory specific safety training. The hazardous chemical training should include but is not limited to the health and physical hazards of the chemicals, permissible exposure limits if applicable, signs and symptoms associated with exposure, appropriate work practices, personal protective equipment, emergency procedures, and methods to detect the presence of a release. See Section 7 of the Laboratory Safety Manual for more information.
 - b. Personnel should complete the following EH&S training before the start of any research work involving the usage of hazardous materials. For a list of available courses and to register for EH&S training:
<http://www.ehs.washington.edu/psotrain/index.shtm>.
 - i. EH&S Laboratory Safety Standard Compliance course for PIs, Laboratory Managers, and Supervisors.

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- ii. Managing Hazardous Materials in the Workplace (hazardous awareness, chemical waste management, waste minimization, and emergency preparedness/spill clean-up) is required for laboratory personnel.
 - iii. Shipping & Transporting Hazardous Materials - required for research personnel involved with the shipping and transportation of hazardous materials (including infectious substances).
6. Material Safety Data Sheets/Chemical Inventory: Maintain a current chemical inventory and location by updating your Material Safety Data sheets (MSDS) into the University's MyChem system. MSDS should be made available to employees at all times and employees should be trained on their contents. For information on MyChem contact Barbara Fougier at 206-543-0467 or <http://www.ehs.washington.edu/epomychem/index.shtm>.
7. Chemical Waste Disposal: Chemical waste may necessitate different means of disposal. Procedures must be in place to ensure all waste streams are managed appropriately inclusive of solid waste, regulated chemical waste, contaminated media, spill clean-up debris, animal bedding, carcasses and sanitary sewer discharges. Waste management guidance is available through EH&S at <http://www.ehs.washington.edu/epowaste/index.shtm>.
8. Emergency Preparedness and Spill Cleanup: Include emergency procedures and spill clean-up guidance as a part of your SOPs. Have appropriate spill clean-up materials available. Know where the spill kits are location and how best to use them. Additional guidance is available by call to the EH&S Spills consultation line at 206-543-0467 or visit the EH&S website at <http://www.ehs.washington.edu/epo/spills/index.shtm#prepare>.