

Basic Safety & Waste Disposal Procedures

Personal Safety

- *Eye protection must be worn at all times in the lab.* Even if you aren't doing something dangerous, someone else in the room probably is. *Contact lenses should not be worn* because chemicals and particulates can get caught behind them, causing severe eye damage.
- *Sensible protective clothing must be worn in the labs* where an unexpected chemical spill may expose you to the risk of injury. This includes shoes that enclose your feet, shorts/skirts/dresses/pants that cover at least to your knee, and shirts which cover your upper arms and torso.
- Long hair should be tied back. Beware of dangling jewelry, loose clothing, and anything else that may get caught in equipment, or dipped in chemicals.
- Eating, chewing gum, and drinking in the lab is not permitted.
Wash your hands, arms, and then face, with soap and water as soon as possible after leaving the lab.
- *Never work alone or unsupervised in the labs.* You need someone who can help if there's an accident.
- No horseplay, pranks or other acts of mischief will be tolerated in the lab.
- *Never wear gloves outside of the lab* to minimize spreading chemicals, bacteria, etc.

Lab Safety

- *Make sure you know the locations of the safety features of the lab;* e.g., eyewash fountains, safety showers, chemical spill kits, fire extinguishers, fire alarms, fire blankets.
- *Immediately notify your TA* in the event of a chemical spill, injury, fire, or other emergency.
- *Know the evacuation route and designated gathering area* in the event of building evacuation.
- *Keep your work area clean and organized* to reduce the possibility of accidents. Label all your containers using the labels provided. Put the lids back onto containers after using them. Do not contaminate original chemical containers. Return all supplies, equipment, cleaned glassware, etc to where they belong after use.
- *Avoid unnecessary exposure to chemicals.* Never pipette by mouth. Never taste or inhale a chemical on purpose. Wear gloves when directly working with hazardous chemicals. Use hoods when appropriate.
- *Take appropriate precautions.* Keep flammables away from hot plates and open flames. Wear gloves when using toxic, carcinogenic, or other hazardous chemicals. Take care with corrosive acids and bases. Always pour concentrated acid slowly into water (never water into acid).
- *Be informed.* Material Safety Data Sheets (MSDS) summarize known hazards associated with every chemical are available from the UT web site <<http://www.utexas.edu/safety/ehs/msds/>>.

Disposal of Chemical Waste

- *Pay attention to waste disposal.* Mistakes can be expensive, hazardous, even lethal.
- *Generate as little waste as possible.* Don't take or prepare more of a chemical than you expect to use.
- *Never return unused portions of chemicals to the reagent bottle.* Unused chemicals are waste.
- *Do not discard chemicals down the sink or in the wastebasket,* unless you are told that it's ok to do so.
- *Do not over-fill a waste container.* Tell your TA that the bottle is getting full and they will replace it.
- *Use the clearly marked GLASS containers to dispose of broken glass and Pasteur pipettes.* Do not place broken glass in the sink or wastebasket, to avoid serious injury to an unsuspecting person. Do not place things that aren't glass in the glass container. Plastic is not glass.
- *Use the clearly marked BIOHAZARD containers to dispose of biological waste.* There is a form you must fill in whenever you dispose of biological waste. Ask your TA where to find that form.
- *Use the correct waste container for your chemical waste.* The attached flow chart is available in the lab. Use it to determine what category your waste falls under. Find the clipboard for that category. Fill in the information about your waste on that clipboard (what chemical(s), what volume/mass, what solvent and concentration if it's a solution). Find the waste container for that category. Make sure there's enough room in the container before adding your waste to it.
- *If you realize that you disposed of a chemical in the wrong container,* make sure the information is recorded on the clipboard of the container you did use. Use *** to mark your entry to help us notice the error.
- *If you have waste whose identity you can't recall,* you can often test your waste (e.g., with litmus paper) to deduce its identity. If you still can't tell, ask your TA, or the Stockroom to help you identify the waste. Do not add unidentified waste to the waste bottles. You will force us to categorize the entire waste container as "unknown" which becomes extremely expensive to identify and dispose of.

Special Projects waste disposal segregation scheme

