

LABORATORY DIRECTIONS FOR CHEMISTRY STUDENTS

I have read and understand the statements designated as LABORATORY DIRECTIONS FOR CHEMISTRY STUDENTS, and agree to abide by them. I acknowledge that any expense for emergency response because of an existing medical condition is my responsibility.

DATE: _____ COURSE: _____ SECTION: _____ LOCKER NUMBER: _____

NAME: _____ SIGNATURE: _____

SAFETY

1. Note the positions of fire blankets (if available) and extinguishers. Be familiar with their operation.
2. Determine the location of the nearest emergency shower and eyewash.
3. Know the proper evacuation procedure from your laboratory and the building.
4. Wear chemical splash goggles at all times in the laboratory. If eye contact with a chemical occurs, wash eyes with copious amounts of water for at least fifteen minutes. Seek medical attention at once.
5. Choose clothing and footwear to provide maximum protection. Shoes should completely enclose the foot (no sandals). Shorts and similar attire leave large areas of skin exposed, and should not be worn in the laboratory.
6. Assume that all chemical reagents are corrosive and toxic. Common routes of exposure are *inhalation*, *skin contact*, and *ingestion*. All contact with skin, clothing, and personal items should be avoided.
7. Any chemical spilled on skin or clothing should be washed off immediately with a large amount of water, flooding the affected area for at least fifteen minutes.
8. Never taste chemicals.
9. Never pipet by mouth. Use a pipet bulb.
10. Do not bring food or drinks into the laboratory.
11. Practice good personal hygiene. Wash your hands when leaving the laboratory.
12. Smoking is prohibited in all laboratory areas.
13. Experiments that produce toxic or noxious fumes must be carried out in a fume hood. If asked to smell a chemical, follow a safe method to avoid excessive exposure.
14. To insert glass tubing or thermometers through rubber stoppers, wet the tube and stopper. Protect hand with a towel.
15. Turn gas off before disconnecting a Bunsen burner from a gas jet.
16. Notify instructor or safety coordinator of any medical conditions that might be problematic in a laboratory environment. This might include such things as asthma, allergies, pregnancy, or seizure disorders. This information will remain confidential, but is necessary to provide a safe and educational laboratory experience.
17. Report all accidents to the TA or instructor immediately.
18. First aid supplies are kept in the stockroom and BL 452.
19. If you have had any special medical emergency training, please make your TA or instructor aware of it.

GENERAL PROCEDURE

1. Only assigned work is permitted in the laboratory, and only under proper supervision at the proper time.
2. No experiments may be performed outside the assigned laboratory period unless explicitly authorized by the professor.
3. Work individually unless otherwise directed.
4. Always read the label on each reagent bottle before using it.
5. Use only the amounts of reagents called for in the experiment.
6. Discard excess reagents properly - never return to reagent bottles.
7. When dispensing chemical reagents, return appropriate caps to bottles. Clean up spilled materials immediately. Report significant spills to the TA.
8. Never place solid waste into the sink or trough.
9. Follow disposal guidelines specified in your lab manual or provided by your instructor. Disposal of materials that are TOXIC, FLAMMABLE, REACTIVE, or CORROSIVE in the lab drain or trash can is *prohibited by law*. If a material may be safely discarded in lab drain, it should be flushed with plenty of water.
10. Used mercury should be transferred to containers labeled "Used Mercury." Broken mercury thermometers must be cleaned up and discarded according to special instructions. Notify your TA if one is broken.
11. Always pour acids into water, never water into acids.
12. Use distilled water only when directed (not in place of tap water).
13. When using a balance, do not place chemicals directly on the balance pan. Immediately clean up any chemicals spilled on balance or nearby.
14. Place broken glass or other sharp objects in the "broken glass" receptacle.
15. Before leaving the laboratory, wash the lab bench top. Confirm that all areas where you have worked are clean and neat. Be certain that all paper and other solid trash have been placed in the proper waste receptacle. *Lock your lab drawer before leaving.*

APPARATUS

1. All apparatus is the property of the State of Kentucky. It is not to be removed from the Department of Chemistry at Murray State University.
2. Check the apparatus in the locker at the beginning of the term. Missing and faulty items will be replaced free if detected during the first laboratory period.
3. During the term, make necessary acquisitions of supplies at the Stockroom.
4. All apparatus on temporary loan from the Stockroom must be returned clean and dry at the end of the period.
5. Students must check apparatus and replace faulty or missing items during the final lab period, or upon withdrawing from the course. Charges for missing or broken items are payable at the Bursar's Office in Sparks Hall. Students failing to complete the final check out procedure will be assessed a \$25 charge.