Do(s)

- 1. Always wear long pants that completely cover the legs in the laboratory and secure long hair and loose clothing (especially loose long sleeves, neck ties, or scarves).
- 2. Always perform the experiments or work precisely as directed by the Course Instructor/TA(s).
- 3. Turn off all heating apparatus, gas valves, and water faucets when not in use.
- 4. Coats, bags, and other personal items must be stored in designated areas, not on the bench tops or in the aisle ways.
- 5. Notify the Course Instructor/TA(s) of any sensitivity that you may have to particular chemicals if known.
- 6. Keep the floor clear of all objects (e.g., ice, small objects, spilled liquids).
- 7. Be careful when handling hot glassware and apparatus in the laboratory. Hot glassware looks just like cold glassware.
- 8. Check the label to verify it is the correct substance before using it.
- 9. Add concentrated acid to water slowly, never add water to a concentrated acid.
- 10. Wear appropriate chemical resistant gloves before handling chemicals.
- 11. Always use a spatula to take a solid reagent from a container.
- 12. When transporting chemicals (especially 250 mL or more), place the immediate container in a secondary container or bucket (rubber, metal or plastic) designed to be carried and large enough to hold the entire contents of the chemical.
- 13. Hold containers away from the body when transferring a chemical or solution from one container to another.
- 14. Weigh out or remove only the amount of chemical you will need.
- 15. Use the laboratory chemical hood, when there is a possibility of release of toxic chemical vapours, dust, or gases. When using a hood, the sash opening should be kept at a minimum to protect the user and to ensure efficient operation of the hood. Keep your head and body outside of the hood face. Chemicals and equipment should be placed at least six inches within the hood to ensure proper air flow.
- 16. Immediately inform about any spills, accidents, or injuries to the Course Instructor/TA(s).
- 17. Clean up all spills properly and promptly as instructed by the Course Instructor/TA(s).
- 18. Dispose of chemicals as instructed by the Course Instructor/TA(s).
- 19. Always wear appropriate eye protection (i.e., chemical splash goggles) in the laboratory.
- 20. Wear disposable gloves, as provided in the laboratory, when handling hazardous materials.
- 21. Wear a full-length, long-sleeved laboratory coat or chemical-resistant apron.
- 22. Wear shoes that adequately cover the whole foot; low-heeled shoes with non-slip soles are preferable.
- 23. Remove any protective equipment (i.e., gloves, lab coat or apron, chemical splash goggles) before leaving the laboratory.
- 24. Wash hands after removing gloves, and before leaving the laboratory.

Don't (s)

- 1. Don't enter the laboratory without valid authorization/permission.
- 2. Don't enter the laboratory with synthetic fingernails, wearing shirts exposing the torso, shorts or short skirts and sandals, open-toed shoes, open-backed shoes or high-heeled shoes and any dangling jewellery.
- 3. Don't take away or remove any equipment or chemicals from the laboratory.
- 4. Don't place the container directly under your nose and inhale the vapours.
- 5. Don't touch your face, eyes, mouth, and body with hands while using chemicals.
- 6. Don't bring any food, beverages, or gum in the chemistry laboratory.
- 7. Don't engage in practical jokes or boisterous conduct in the laboratory.
- 8. Don't run in the laboratory.
- 9. Don't use personal audio or video equipment in the laboratory.
- 10. Don't return the excess to its original container, but properly dispose of it in the appropriate waste container.
- 11. Don't ever pour chemical waste into the sink drains or wastebaskets.
- 12. Don't store/keep chemicals on the lab bench, on the floor, or in the laboratory chemical hood.
- 13. Don't move or sit on laboratory stools without permission from Course Instructor/TA(s).
- 14. Don't work in the laboratory without the supervision of the Course Instructor/TA(s).
- 15. Don't perform any unauthorized experiments.
- 16. Don't leave experiments (synthesis, titration) while in progress.
- 17. Don't handle bottles that are wet or too heavy for you.
- 18. Don't try to catch a falling object (glassware, reagent bottles, volumetric flasks).
- 19. Don't use laboratory glassware for eating or drinking purposes.
- 20. Don't apply cosmetics while in the laboratory or chemical storage area.
- 21. Don't ever touch, taste, or smell any reagents/chemical.
- 22. Don't use a metal spatula when working with peroxides. [Metals will decompose explosively with peroxides.]
- 23. Don't point the open end of a test tube containing a substance at yourself or others.
- 24. Don't fill a pipette using mouth suction. Always use a pipette puller for pipetting.

Emergency Guide

- Know the location of all the exits in the laboratory and building.
- Know the location of the emergency phone.
- Know the location of and know how to operate the following:
 - Fire extinguishers
 - Fire blankets
 - Eye washes
 - o First-aid kits
 - o Deluge safety showers

Housekeeping

- Keep work area neat and free of any unnecessary objects.
- Do not block the sink drains with debris.
- Never block access to exits or emergency equipment.
- Inspect all equipment for damage (cracks, defects, etc.) prior to use; do not use damaged equipment.
- Place chemical waste in appropriately labelled chemical waste containers.
- Properly dispose of broken glassware and other sharp objects (e.g., syringe needles) immediately in designated containers.
- Dispose of weigh boats, gloves, filter paper, and paper towels into chemical waste bins in the laboratory.

Common Safety Symbols





Radioactive

Compressed Gas