

**Northern Kentucky University Department of Chemistry
Safety Regulations**

The Chemistry Department at Northern Kentucky University takes safety extremely seriously. For your own safety and the safety of those around you, you must be aware of your surrounding at all times. Students who fail to comply with the safety rules outlined below may be dismissed from class.

1. Personal Safety Requirements

- a. Safety glasses must be worn in lab at all times.
- b. Closed toed shoes must be worn while in the lab.
- c. Students are required to know the location and use of the following safety equipment if available in the lab: fire extinguishers, safety blankets, eye washes, safety showers, the fire alarm and the emergency gas shut off.
- d. All accidents must be immediately reported to the instructor.
- e. Eating and drinking are not permitted in the lab.
- f. Never taste chemicals.
- g. If an experiment has you smell vapors, do not directly inhale them. Waft the vapors towards your nose instead.
- h. Experiments are to be performed in fume hoods unless otherwise instructed.
- i. Do not carry stock bottles to your workspace.
- j. Keep your workspace clean! Clean up spills immediately. Consult with your instructor for instructions on how to clean up your spill.
- k. Your workspace must be clean before you leave the lab.
- l. Students with health concerns that could possibly impact the lab (seizure disorders, diabetes, etc.) are strongly encouraged to notify the instructor before beginning any experiments.
- m. Your faculty instructor may impose additional safety requirements beyond those listed here.

In the event of a fire alarm turn off any gas and immediately leave the building by the nearest exit. If you are the last one out of the lab make sure the door is closed behind you. Meet your instructor at the designated meeting place. Do not re-enter the lab until indicated to do so by the instructor.

2. Waste and Sample Management

- a. Students should always follow the instructions of their instructor when disposing of waste generated during an experiment.
- b. Broken glass should always go into the provided broken glass boxes and never in the trash.
- c. Only waste approved by the instructor should go down the drain or in the trash – most waste generated in the department cannot be disposed in this manner.
- d. All waste must go into the correct waste container. In some labs waste may be separated by type (solid, liquid, halogenated, etc.), so follow the instructions of your instructor as to which container to use. never goes into the sink or the trash.
- e. Any chemical samples left in your drawer between experiments should be clearly labelled to ease in its eventual disposal.

3. Additional recommendations for your safety.

- a. Wear an apron or lab coat when performing experiments.
- b. Do not use your cell phone in the lab.
- c. Wear gloves when using chemicals. If you are not transporting chemicals between labs where gloves are needed, you are encouraged to remove gloves before leaving the lab and entering common space. You should avoid touching door knobs, your cell phone, etc. with your gloves on whenever possible.

4. Best laboratory practices
 - a. Use only clean glassware.
 - b. Do not use cracked or broken glassware.
 - c. Exercise caution when using glass tubing, especially when inserting it into rubber stoppers.
 - d. When heating liquids in test tubes ensure that the open end of the tube points away from yourself and others. In general, avoid heating liquids in narrow containers that have small openings. For example, graduated cylinders, volumetric glassware, etc.
 - e. Carefully read all labels on the reagent bottles before using them. Use only the quantities and concentrations required for the experiment.
 - f. Never pour water into concentrated acid. Always add the acid slowly into the water while stirring the mixture constantly.
 - g. Should your instructor permit it, always use a clean spatula or pipets when inserting them directly into reagent bottles. Some instructors restrict this practice, in which case you should transfer an approximate amount into another container (weighing paper, beaker, weighing boat, etc.), then use your own spatula or pipet.
 - h. Do not return unused chemicals to the reagent bottles.
 - i. Do not weigh chemicals directly on the balances. Use weighing paper, a weighing boat, a watch glass, test tube, etc.