

CHEMISTRY LABORATORY SAFETY RULES

1. Conduct yourself in a responsible manner at all times in the laboratory.
2. Be familiar with your lab assignment **before** you start the lab. Follow all written and verbal instructions carefully. If you do not understand a direction or part of a procedure, ask the teacher before proceeding.
3. Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages.
4. Safety goggles must be worn whenever you work in lab. Gloves should be worn whenever you use chemicals that cause skin irritations or need to handle hot equipment. Wear older clothes that cover the maximum amount of skin.
5. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times.
6. Know the locations and operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, and fire extinguisher. Know where the fire alarm and the exits are located.
7. Dispose of all chemical waste properly. Never mix chemicals in sink drains. Sinks are to be used only for water and those solutions designated by the instructor. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in the proper waste containers, not in the sink.
8. Keep hands away from your face, eyes, mouth, and body while using chemicals. Wash your hands with soap and water after performing all experiments. Clean, rinse, and dry all work surfaces and equipment at the end of the experiment.
9. If you spill acid or any other corrosive chemical on your skin or clothes immediately wash area with large amounts of water.
10. If a chemical should splash in your eye(s), immediately flush with running water from the eyewash station for at least 20 minutes.
11. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemical unless specifically instructed to do so. The proper technique for smelling chemical fumes (when instructed to do so by the teacher) is to gently fan the air above the chemical toward your face. Breathe normally.
12. **Never return unused chemicals to their original containers.**
13. Never use mouth suction to fill a pipet. Use a pipet bulb or pipet filler.
14. Acids must be handled with extreme care. **ALWAYS ADD ACID SLOWLY TO WATER**, with slow stirring and swirling, being careful of the heat produced, particularly with sulfuric acid.
15. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware. **Do not immerse hot glassware in cold water; it may shatter.**
16. Never leave a lit burner unattended. Never leave anything that is being heated or is visibly reacting unattended. Always turn the burner or hot plate off when not in use.
17. Do not point the open end of a test tube being heated at yourself or anyone else.
18. Heated metals, glass, and ceramics remain very hot for a long time. **They should be set aside to cool on a trivet** and then picked up with caution. Use tongs or heat-protective gloves if necessary. Determine if an object is hot by bringing the back of your hand close to it prior to grasping it.