

Chemistry Safety Rules

The following **must** be done before entering the lab.

- Study your lab assignment before you come to the lab. If you have any questions, be sure to ask your instructor for help.
- **Tie back long hair**
- **Hanging jewelry must be removed.** It would be better to put any jewelry you're wearing in your pocket until after the lab.
- **Loose and/or draped clothing needs to be removed or tightened**
- Remove and hang up coats.
- You **must** wear **closed – toe shoes** during lab activities. **No sandals or open toe shoes allowed. No exceptions!**
- **Horseplay is dangerous** – getting distracted is dangerous around chemicals.

In the Lab and During the Lab:

- You **must** always wear **goggles** in the lab while doing experiments. When needed, gloves and aprons may be required to reduce contact with irritating materials. **Goggles are required any time chemicals, heat, or glassware are used!**
- Report any accident, injury, incorrect procedure, or damaged equipment to your instructor. Immediately inform your teacher of any spills. **Always tell your instructor at once of any accidents in the lab!**
- Handle all chemicals carefully. **All chemicals in the laboratory should be treated as hazardous substances!** Check the labels of all bottles **before** removing the contents. Read the label **three** times:
 - Before you pick up the container.
 - When the container is in your hand.
 - When you put the bottle back.

Do's and Don'ts in the Lab:

- **Never** perform an experiment unless the instructor is present! **Never** perform any experiment that is not specifically authorized by your instructor! Do not play games with chemicals!
- Don't take reagent bottles to your work area unless instructed to do so. Use test tubes, paper, or beakers to transport your chemicals. Take only small amounts.
- **Don't return unused chemicals to the stock bottles. Never** remove any chemical substance from the laboratory!
- Don't insert droppers into reagent bottles. Pour small amounts into a beaker.
- Don't heat graduated cylinders, burettes, or pipettes with a laboratory burner.
- Don't taste any chemicals. **Hint! – If you don't want to eat lab chemicals then “Don't eat in the Chemistry classroom”!**

- **Never** fully inhale the vapors of any substance! **Waft a tiny amount of vapor toward your nose, only if your instructor says to do so.**
- **Always keep combustible materials away from an open flame! Never leave Bunsen Burners unattended when lighted!**
- **When heating a substance in a test tube, be careful not to point the mouth of a test tube at another person or yourself! Never look down the mouth of a test tube! Never heat a stoppered test tube or flask!**
- Always use caution and proper equipment when handling hot apparatus or glassware. Hot glass looks the same as cool glass. **Never** place hot glassware under cold water.
- Always dispose of broken glass, unused chemicals, and products of reactions only as directed by your instructor.
- Know the correct procedure for preparing acid solutions. **Always add the acid slowly to water!** Remember – **Acid to Water is Smarter!**
- **If you spill a small amount of acid or base on your hands, rinse for several minutes with water while calling for your instructor!**
- Keep the area around a balance clean. **Never** place chemicals directly on the pan!
- Keep your lab station neat and clean during your lab activity.
- After completing an experiment, clean and put away your equipment. Clean your work area. Make sure the gas and water are turned off. **Wash your hands with soap and water before you leave the lab!**
- **Be aware of the number of exits leading from your lab area (i.e. 2). Also be aware of where all the lab safety equipment is located (eyewash, safety shower etc...)**
- **If you get chemicals in your eyes, you should go to the eyewash immediately and flush the affected areas while holding your eyelids open. Make sure you are calling for your instructor during all of this!**
- **If your partner catches on fire, you should help them to drop to the ground and roll and get the fire blanket for them while calling for your instructor!**
- **If a large amount of chemical gets on your shirt and arms, you should go to the emergency shower and take off your shirt while calling for your instructor!**
- **The best way to put out a small fire on the lab table is to cover the fire with a beaker.**
- **The documents listing hazardous chemical information are called materials safety data sheets (MSDS) or safety data sheets (SDS).**
- **When gathering equipment for an experiment,**
 1. **Read all the directions for the lab first.**
 2. **Examine any glassware carefully to check for chips or cracks.**
 3. **Clean any glassware that appears dirty.**
- **Remember, when in doubt, inform or ask your Instructor!!!**