

LAB SAFETY

1. Follow all instructions carefully. Use special care when you see the word **CAUTION**.
2. Never do laboratory work unless your teacher is supervising you.
3. Always follow the directions given by your lab manual or by your teacher.
4. Know the location of ALL safety equipment in the laboratory.
5. Always wear protective eyewear and clothing unless instructed otherwise by your teacher.
6. NEVER run, push, or engage in horseplay of any kind in the laboratory.
7. Never eat or drink in the laboratory.
8. Report any accident, spill, or breakage to you teacher **immediately**.
9. Always clean your work area and equipment at the end of the lab period.
Glassware is to be cleaned and put away in the proper location
10. Dress properly for the laboratory.
 - a. Roll long sleeves above the wrist
 - b. Don't wear loose-fitting sleeves or bulky outerwear.
 - c. Tie back long hair.
11. Use care with electricity.
 - a. Always make sure electrical cords are kept away from the edge of the table where people passing by can catch them.
 - b. Always make sure that your hands are dry before you handle any electrical equipment.
 - c. Always use electrical equipment in a completely dry area.
12. Be careful with laboratory glassware.
 - a. Always check glassware before you use it. Never use glassware that is chipped or cracked. Show this glassware to your teacher.
 - b. Never use your bare hands to clean up broken glassware.
 - c. Always be careful when carrying glassware to and from your work area.
13. Be very careful with heat or fire.
 - a. Always use tongs to handle hot containers, objects, or materials.
 - b. Always heat liquids slowly and/or cover to avoid spattering.
 - c. Always turn burners and hotplates off when they are not in use.
 - d. Never allow flammable materials such as alcohol near an open flame.
 - e. Notify your teacher in the case of a burn. Minor burns should be soaked immediately in cold running water.
14. Use extreme care when working with chemicals.
 - a. Always treat the chemicals in the laboratory as hazardous.
 - b. Never taste substances in the laboratory.
- c. Never smell or touch substances in the laboratory without specific instructions.
 - d. Never mix any chemicals unless you are instructed to do so.
 - e. Use materials from containers that are clearly marked.
 - f. Wear goggles and an apron whenever heating chemicals.
- g. If you spill any chemicals on your skin, wash your skin with running water. If chemicals splash in your eyes, use an eyewash.
 - h. Notify your teacher immediately of any chemical spills.



Class A: Compressed Gas

This class includes compressed gases, dissolved gases and gases liquified by compression or reffridgeration. Examples: gas cylinders for oxyacetylene welding or water disinfection



Class B: Flammable and Combustible Material

Solids, liquids and gases capable of catching fire or exploding in the presence of a source of ignition. Examples: white phosphorus, acetone and butane. *Flammable* liquids such as acetone are more easily ignited than *combustible* liquids such as kerosene.



Class C: Oxidizing Material

Materials which provide oxygen or similar substances and which increase the risk of fire if they come into contact with flammable or combustible materials. Examples: sodium hypochlorite, perchloric acid, inorganic peroxides.



Class E: Corrosive Material

Acid or caustic materials which can destroy the skin or eat through metals. Examples: muriatic acid, lye.



Class F: Dangerously Reactive Material

Products which can undergo dangerous reaction if subjected to heat, pressure, shock or allowed to contact water. Examples: plastic monomers such as butadiene and some cyanides.



Class D: Poisonous & Infectious Materials

Class D, Division 1 Materials causing immediate and serious toxic effects. This division covers materials which can cause the death of a person exposed to small amounts. Examples: sodium cyanide, hydrogen sulphide.



Class D, Division 2

Materials causing other toxic effects. This division covers materials which cause immediate eye or skin irritation as well as those which can cause long-term effects in a person repeatedly exposed to small ammounts. Examples: acetone (irritant), asbestos (carcinogen), toluene diisocyanate (senzitizer).



Class D, Division 3

Biohazardous infectious material. This division applies to materials which contain harmful microorganisms. Examples: cultures or diagnostic specimens containing salmonella bacteria or the hepatitis B virus