

STUDENT SAFETY PRACTICES IN THE CHEMISTRY LABORATORY

These precautions and suggestions are for your own safety and that of your classmates. Study this sheet thoroughly and keep it in your notebook where it will be available for reference at any time. Failure to follow these instructions can result in suspension from the lab.

General Safety Instructions

- Report immediately to the teacher any accident, however slight.
- Ask for instructions whenever you do not clearly understand how to handle a chemical or conduct an experiment.
- Observe all signs, labels, and other directions that recommend caution.
- Do not touch or handle laboratory equipment or materials without the teacher's permission.
- Follow carefully the teachers' instructions in handling any chemical.
- Get your teacher's specific permission before trying any experiment or combination of chemicals not included in your laboratory manual.
- Know where the first aid kit, blanket, and fire extinguisher are kept in the laboratory.
- Safety glasses will be worn at all times while working in the laboratory.
- Lab aprons are available and will be worn by all pupils.
- No student may work in the laboratory unless supervised by a teacher.

Handling Chemicals and Equipment

- Take special care to operate any equipment within the limits of pressure, speed, temperature, and the like, as shown in the manufacturer's specifications.
- Watch for the word **CAUTION** on laboratory materials. Use such materials only after you understand clearly how to handle them safely.
- Dispose of broken glass only in the special receptacle provided for that purpose. Clean up your laboratory position when through work.
- Dispose of any solid waste materials in the refuse can, waste liquids in the sink. Pour waste acids into the sink with the water running. Do not put solids in the sink.

- Wrap any glass tubing, bottle, or bulb in wet cloth if any pressure, internal or external, is applied to it. When inserting glass rod or tubing in rubber corks, use water to lubricate; wrap the tubing in cloth; and then use a gentle, twisting motion when inserting or removing.
- Remove any glass tubing, thermometer, or other equipment from stoppers immediately after use to avoid “freezing,” covering the tubing with cloth.
- Use dilute acids in all laboratory work unless you are specifically instructed to use the concentrated form.
- Hold containers over the sink when pouring any concentrated acid.
- To dilute acids, pour acids into water in a small stream and stir constantly—never add water to acid.
- If acids or bases (especially if they are concentrated) are spilled on the skin, clothing, or especially eyes, rinse thoroughly with water and call the teacher immediately while rinsing.
- Never take chemicals out of the laboratory.
- Keep chemicals away from your clothing.
- Never taste any laboratory substance unless you are instructed to do so; many chemicals are poisonous.
- Work with mercury or mercury compounds only under the supervision of the teacher.
- Use suitable containers as instructed to carry laboratory materials to your place of work.
- Use materials in the smallest quantities possible. not only to avoid waste but also to avoid accidents; a small quantity may be safe while a larger amount could be hazardous.
- Use special caution in handling inflammable materials and hot objects; in particular keep them out of your chemistry locker.
- Wash bottles are to be filled with distilled water only. Using wash bottles for purposes other than that for which they were designed will not be tolerated.
- Always wash your hands with soap before leaving the laboratory for your next class.