## CHEMISTRY LABORATORY SAFETY AND HOUSEKEEPING RULES

## SAFETY RULES

- 1. Prepare for each experiment by reading all of the directions before lab starts.
- 2. Know the locations of the eye wash, safety shower, fire extinguishers, fire blankets, first-aid kit, fume hoods, telephone and all exits that are to be used in an emergency.
- 3. Wear safety goggles or visorgogs with indirect ventilation at all times in the lab (goggles provide the best protection).
- 4. Wear prescription glasses, if you need them, under your safety goggles or visorgogs (contact lenses should not be worn in the laboratory because fumes may accumulate under the lenses and injure your eyes plus the lenses make it difficult to flush chemicals from your eyes).
- 5. Tie long hair back to keep your hair out of burner flames and harmful chemicals.
- 6. Do not wear clothing with loose, flowing sleeves to keep your sleeves out of burner flames and harmful chemicals.
- 7. Wear shoes that cover all of your feet to protect them from broken glass and chemical splashes (the best types of shoes are closed-toe and made out of leather).
- 8. Wear clothes that cover your torso and your legs to the knees (good clothing can be protected with a lab apron or coat).
- 9. Do not eat or drink in the laboratory.
- 10. Do not taste any chemical reagent.
- 11. Assume all chemical reagents are hazardous if you are unsure.
- 12. Do not smell chemical reagents directly (when you are instructed to smell a chemical, do so by gently wafting the vapors toward your face and do not inhale deeply).
- 13. Do not pipet solutions by mouth (use a rubber suction bulb to fill the pipet).
- 14. Do not work with flammable reagents near a flame.
- 15. Do not engage in games or horseplay in the laboratory (never run in the laboratory).
- 16. Do not attempt unauthorized experiments in the laboratory.
- 17. Do not work in the laboratory in the absence of your instructor or an authorized representative.
- 18. Use a fume hood when required.
- 19. Never heat a closed container (pressure build up can cause the container to explode).
- 20. When performing a dilution, never pour water into concentrated reagents (always pour the reagent into the water).
- 21. If you spill a chemical reagent on yourself, immediately flood the exposed area with water, then summon the laboratory instructor (inform the instructor immediately about any other accidents or spills).
- 22. Be aware of your neighbors (a neighbor's accident may injure you).
- 23. Avoid touching your face and rubbing your eyes while in the laboratory (if you must do so, first wash your hands).
- 24. Wash your hands before leaving the laboratory.
- 25. Do not violate any other safety rule issued by your laboratory instructor.

## CHEMISTRY LABORATORY SAFETY AND HOUSEKEEPING RULES

## HOUSEKEEPING RULES

- 1. Clean up broken glass immediately with a broom and dustpan (do not use your hands and dispose of broken glass in the special container that is provided in the lab).
- 2. Chemical spills must be cleaned up immediately (notify your instructor who will advise you how to clean it up and/or assist you and always dispose of the collected contaminated chemical properly as instructed).
- 3. Do not pour any chemical down into the sink or in the trash without authorization (clearly labeled disposal bottles will be provided when needed).
- 4. Take containers to the stock of chemical reagents typically found in the fume hoods (do not bring stock chemicals to your laboratory bench).
- 5. Read and then reread the label on a reagent bottle carefully to ensure you have the correct chemical and the correct concentration.
- 6. Do not insert your own pipet, medicine dropper, or spatula into a stock bottle.
- 7. Use special care with stoppers or tops of stock bottles. Do not allow them to pick up contamination (always replace the stopper or top of a stock bottle when you are finished taking some of the reagent and make sure that you put the stopper or top back onto the correct bottle).
- 8. When pouring liquid reagents from bottles, hold the bottle with the label against the palm of your hand so that the liquid is poured from the side opposite the label (if any liquid runs down the outside of the label, immediately wipe off the liquid).
- 9. Do not take any more of a reagent than is required (many of the chemicals used in the laboratory, including de-ionized water, are costly).
- 10. Never return any unused reagent to a stock bottle (if you take too much of a chemical, dispose of it as directed by your instructor or offer it to a classmate who needs it).
- 11. Set up your glassware and other apparatus away from the edge of your laboratory bench.
- 12. Thoroughly clean and dry the area around your laboratory bench before leaving lab.
- 13. Keep shared areas of the laboratory such as the balance room and where the stock bottles are stored clean (it is especially important to keep the balances clean and free of chemical spills).
- 14. Keep your laboratory equipment clean (good results depend on clean equipment).
- 15. If a piece of equipment containing mercury is broken, inform your laboratory instructor immediately (keep the area blocked off to avoid scattering the mercury).
- 16. Follow any other housekeeping rules given by your laboratory instructor.