

## I. SAFETY RULES

1. If you are pregnant, consult with your physician about possible exposure to chemicals in the lab.
2. Report every accident, no matter how minor, immediately to the instructor.
3. Wear approved eye goggles over your eyes at all times that any lab work (including cleanup) is being done by you or by anyone near you. If you wear your own frame eyeglasses, you must wear goggles over them.
4. Wear protective closed-top shoes (no sandals or no open heels) when working in the lab.
5. Learn the location and operation of each item of safety equipment: fire extinguishers, fire blanket, eye washes, drench nozzle, drench shower, emergency telephone, and first aid kit.
6. If a chemical should splash into your eye, immediately begin washing the eye with a large amount of water from the emergency eye wash fountain or the drench nozzle. Continue washing and get someone to notify the instructor as soon as possible.
7. If a chemical should splash on your skin or clothing, wash it off immediately with a large amount of water and then consult the instructor.
8. Do not add water to concentrated sulfuric acid nor add concentrated sulfuric acid to a small amount of water. If dilution is necessary, add the concentrated sulfuric acid, with careful stirring, to a larger volume of water.
9. Be especially careful when handling any concentrated acid or base. Clean up spills immediately.
10. Be especially careful when using bromine. Avoid any contact of it with your skin and avoid breathing its vapor.
11. Be especially careful with flammable materials. Use them in small amounts, in covered containers whenever possible, in a ventilation hood area, away from flames and other sources of ignition (hotplates, electric driers, lamps, etc.). Dispose of flammable materials in the labeled disposal container in the large fume hood - not in the sink.
12. Treat all chemicals as if they were poisonous unless you know them to be otherwise. Keep them off your skin and clothing, avoid breathing vapors or dust, and clean up any spills immediately.
13. Never eat, drink, nor smoke anything while you are in the lab. Opened food or beverage containers are not permitted in the lab.
14. Never taste a chemical nor smell a chemical unless directed to do so by the instructor, and then follow directions carefully. When instructed to smell a chemical, gently waft some vapor toward your nose.
15. Never look down into a test tube or other container that is being heated, nor point it toward anyone.
16. Avoid using any glass tubing or rod that is broken, chipped, or has sharp edges.
17. When trying to insert glass tubing or a thermometer into a stopper, lubricate the end of the tubing and the stopper hole with a drop of glycerin, wrap the tubing with a cloth towel, and grasping it close to the stopper, use a gentle twisting motion to insert it. If moderate pressure is insufficient, use a stopper with a larger hole or glass tubing with a smaller diameter.
18. If you should break a thermometer or manometer, get the instructor immediately.
19. Examine all glassware before use and replace any that is cracked or chipped.
20. Dispose of capillary tubes, Pasteur pipets, and all broken glass in the broken glass container and not in the trash cans.

21. Never use a graduated cylinder or any other thick-walled glassware for heating or mixing chemicals. Use a test tube, beaker, or flask instead.
22. If you discover a burner that is turned on but has no flame at the top, turn off the gas immediately. Do not touch the burner until you are sure that it is not hot.
23. Always check the label slowly and carefully two times before you take a chemical from a bottle.
24. Never pour chemicals back into the stock bottle.
25. Do no unauthorized experiments.
26. Never work in the lab without an instructor's supervision, never work in the lab alone, and never do lab work outside your scheduled lab period without written permission from your instructor.
27. Go about your work quietly and in a mature manner. Horseplay is dangerous and is never permissible in the chemistry lab.
28. Keep aware of the people around you and be prepared to help anyone in an emergency.
29. Wash your hands thoroughly with soap and water after handling any chemicals and before leaving the lab.

## II. GENERAL LABORATORY PROCEDURES

1. Use the stock chemicals at the supply area. Bring your own labeled container there and pour what you need. Do not set the stopper or cap down on the bench; instead, hold it in your hand and replace it on the bottle when finished. Do not take the stock bottle to your bench.
2. Do not put your own measuring or transfer device (spatula, scoopula, dropper, pipet, etc.) into the stock bottle. Instead, pour out some chemical into a clean and dry container, take it to your bench and measure or transfer there.
3. Do not return excess chemicals to the stock bottle.
4. Do not put excess or waste materials in the trash cans or the sinks unless directed to do so by the instructor. Such materials should be placed in the special waste collection containers in the large ventilation hood. If in doubt as to how to dispose of any material, ask the instructor or the Stockroom manager.
5. Do not put matches, paper towels, boiling chips, litmus paper, wood splints, metals or other water-insoluble materials in the sinks.
6. Clean up any spills you make and any spills you find.
7. Clean up your lab bench, the stock supply area and your balance after you use them.
8. Put away all of your locker equipment in your locker (and no one else's) at the end of the period. Take apart all ringstands and put them and any other non-locker items back in their proper places. Return all supply items or special equipment to the supply cart or the stockroom.
9. Clean and dry all items checked out from the Stockroom before returning them.
10. Lock your locker before you leave.
11. You will be charged for breakage or loss of laboratory equipment.
12. If for any reason you fail to have your locker checked out by the Stockroom staff at or before the scheduled locker checkout time, (even if you drop the course), **you will be charged a \$50.00 fine** for cleaning and inventorying the contents of your locker. If you do drop the course or miss the scheduled locker checkout period, come to the Stockroom or call (949)582-4812 before the end of the semester to make an appointment to check out your locker and to find out if you have any lab charges.

**I have read the rules and understood the Safety Rules and General Laboratory Procedures and agree to follow them (letter and spirit).**

Signature

Date

Printed Name

Student I.D.