

CHEMICAL ENGINEERING LABORATORY

SAFETY RULES

1. Smoking and open flames are prohibited in the laboratory.
2. Find out the location of First Aid Box.
3. Know the location and use of all emergency, protective, and fire fighting equipment.
4. Safety glasses will be worn at all times where applicable during laboratory periods.
5. Wear apron (lab overall) in the lab when running apparatus and handling liquids.
6. A dust mask should be worn when handling powdery solids.
7. Wear rubber gloves when handling liquids.
8. No equipment is to be operated until the approval of the instructor has been obtained at the start of class. Only the equipment pertaining to the assigned experiment is to be operated. All members of a group are to be properly informed on the safety aspects of their assigned experiment and to be familiar with the safety aspects of surrounding experiments.
9. The safety precautions in the experimental plan must be followed.
10. Make sure you understand how the experimental apparatus works and before operating any valve, switch, etc., know precisely what the effect of your manipulation will be.
11. No operating equipment will be left unattended. At least two members of the group must be present while the equipment is operating.
12. Turn off all the valves on cylinders of compressed or liquefied gases when not in use.
13. Students are not allowed to open gas cylinders.
14. Keep all inflammable liquids or gases away from open electrical equipment and other sources of ignition.
15. Gas cylinders must be kept in a stand or chained vertically to a bench.
16. Avoid inhalation of gases or vapors of any kind, especially: Methanol, Acetone, and Mercury.
17. Do not leave cables trailing across the floor of lab.

18. The laboratory floor must be kept dry, clean, and uncluttered at all times. Any spills should be cleaned up immediately.
19. Do not smell directly any chemical being heated.
20. For electrical safety:
 - a. Power must be off before making electrical connections.
 - b. Avoid splashing or spraying water on electrical connections, walls sockets, and junction or power boxes.
 - c. Keep extension cords away from traffic and water.
 - d. Do not use three-phase sockets (with red shutters) for any laboratory equipment.
21. For mixing and stirring devices:
 - a. Keep hands, hair, and loose clothing away from agitator.
 - b. Make sure the agitator is immersed in the solution to be mixed before starting motor.
 - c. Turn off motor before removing the agitator from the mixed solution.
22. Any accident or hazardous situation must be reported to the Laboratory Supervisor immediately.
23. Always remember: SAFETY IS GOOD TECHNIQUE!