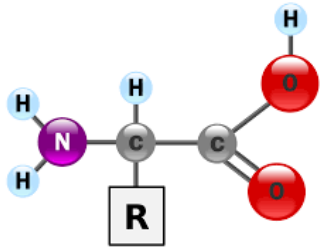
BCH 302

Outline:

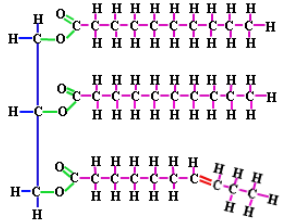


Qualitative tests of amino acids

DNA

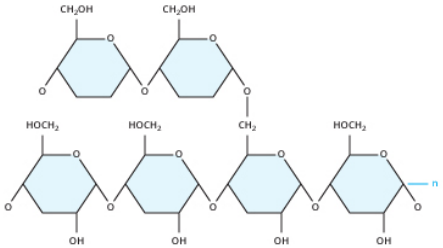
BCH302

Qualitative and quantitative tests of proteins



Qualitative tests of lipids

Qualitative tests of carbohydrates

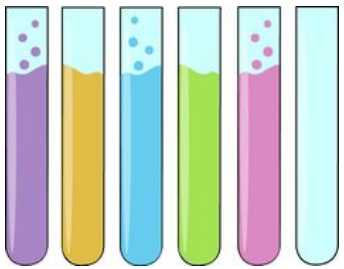


Types of assay:

Assays

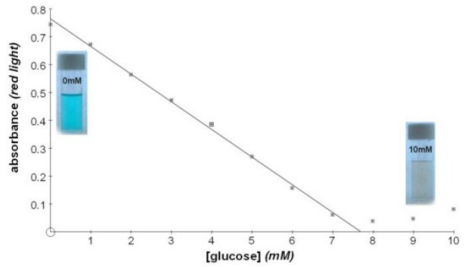
Qualitative assays

Determine if specific substance is there or not, by color or some other quality.



Quantitative assays

Determine the concentration of a substance.



Writing a Report:

1. Cover page: Title, course number, student name.
2. Introduction: In this part you discuss the background that will help to understand your topic.
3. Objectives.
4. Materials and method: As lab sheet.
5. Results: You should report all your result that you get from your experiment. Any tables, figures or calculation.
6. Discussion: In this section you are required to describe of what happened in the experiment [Principle] , explain your results (reasons for why you get your results) and make conclusions by comparing your results to expected values. Even if you obtained unexpected results, the discussion section is the section to justify or explain the reasons why you have obtained such results.
7. Questions.
8. References.

General Laboratory Safety

Safe working protects:

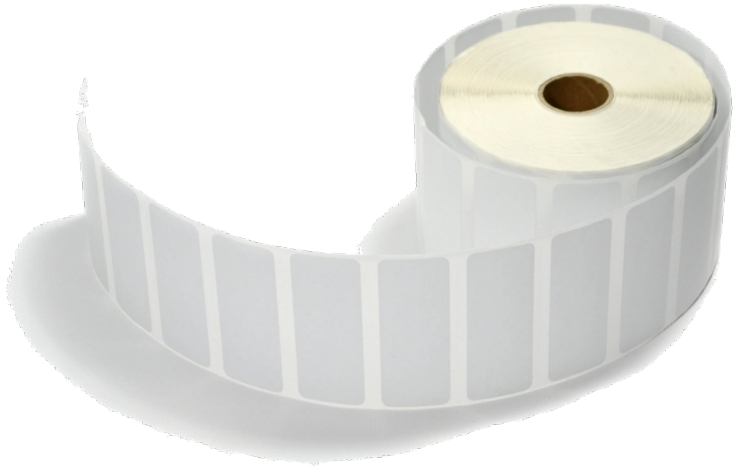
- You.
- Other lab workers and visitors.
- Your work.

General consideration:

- Never eat, drink or chew gum in the lab.
- Do not taste , smell or touch any chemical.
- Tell your instructor about any accident .
- Tie your hair before doing an experiment.
- Closed-toed shoes should be worn at all times.
- Wash your **hands** with soap after an experiment.
- You must know all exits in your lab, eye washer, and fire extinguisher, first aid kit.
- Do not touch any electrical sources .

Before starting :

- Before start working, be sure to **label** the glassware.
- Glassware should be **clean** before using.



After work:

- After finishing the experiment turn off all the equipments, clean your work bench.
- **Glassware must be cleaned and kept back at the proper place.**

Personal Protective Equipment :

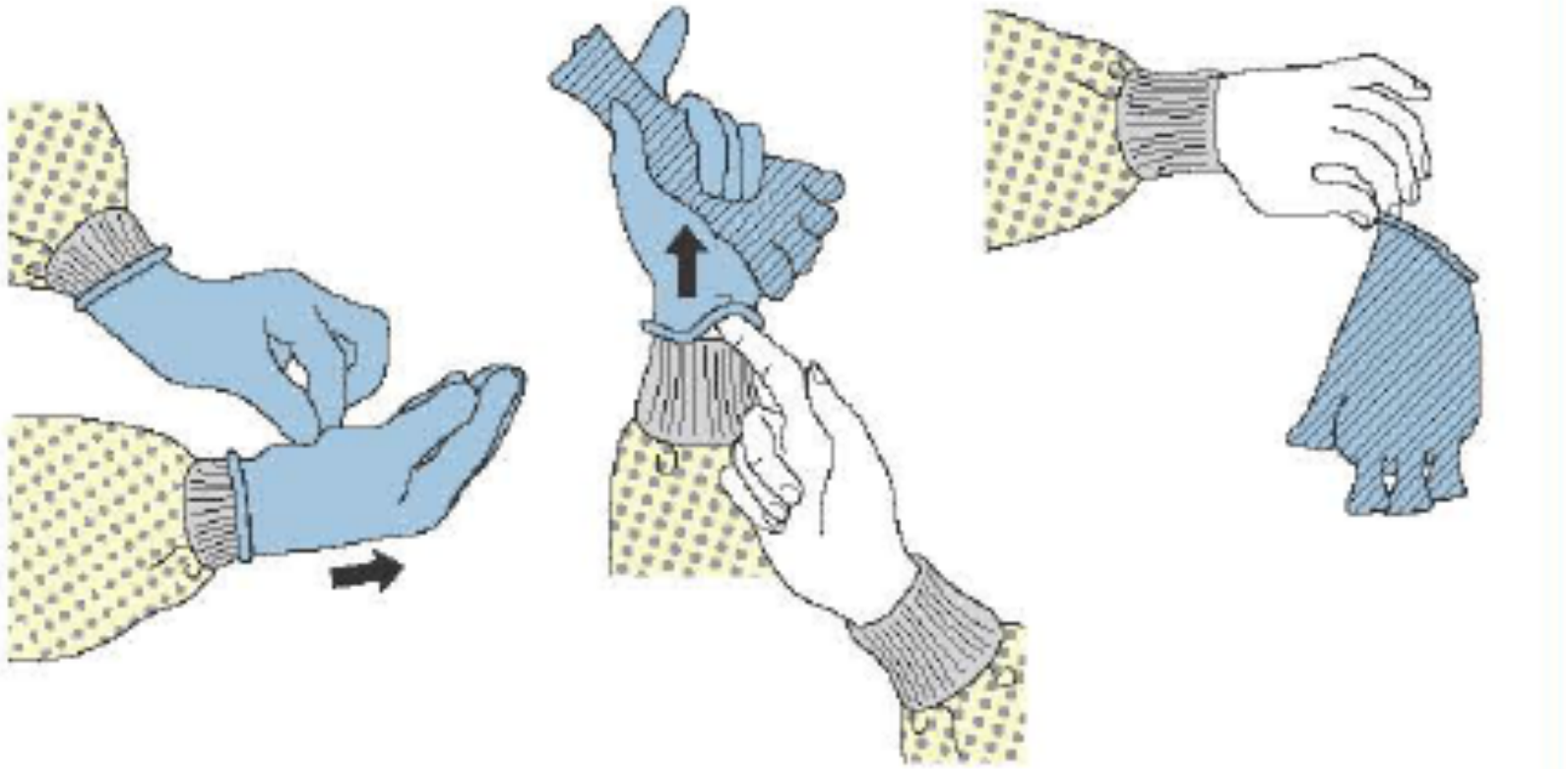
- Place your bag in the correct area.

- Lab coat should be worn all the time in the lab.

- Protective gloves should be worn when handling hazardous materials.

- Protective glasses should be worn when using hazard chemicals.

How to remove gloves?

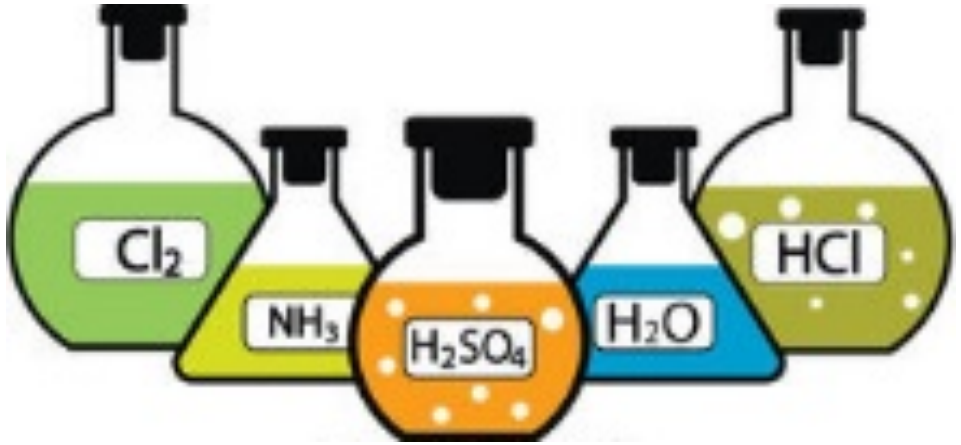


Dealing with chemicals:

- Consider <u>all chemicals to be hazardous.</u>
- Know what chemicals you are using and notice the **hazard symbols**.
- Carefully **read the label** twice before taking anything from a bottle.
- **Never point** a test tube that you are heating at yourself or your neighbour.
- You must work at the **hood** when dealing with a chemical with fumes.
- If chemicals come into **contact with your skin** or eyes, **flush** immediately with water and consult with your instructor.

Dealing with chemicals:

- Always pour acids into water. If you pour water into acid, the heat of reaction will cause the water to explode into steam.
- Do not forget to **label your tubes** before starting the lab.
- **Close** all chemical bottles after finishing
- Dispose chemicals properly.



Hazard symbols:

Information about chemicals:

- **Material Safety Data Sheet (MSDS)** is a document that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with the chemical product. It also contains information on the use, storage, handling and emergency procedures all related to the hazards of the material.

ScienceLab.com
Chemicals & Laboratory Equipment

Health	2
Fire	3
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Ethyl alcohol 200 Proof MSDS

Section 1: Chemical Product and Company Identification

Product Name: Ethyl alcohol 200 Proof
Catalog Codes: SLE2248, SLE1357
CAS#: 64-17-5
RTECS: KQ6300000
TSCA: TSCA 8(b) inventory: Ethyl alcohol 200 Proof
CI#: Not applicable.
Synonym: Ethanol; Absolute Ethanol; Alcohol; Ethanol 200 proof; Ethyl Alcohol, Anhydrous; Ethanol, undenatured; Dehydrated Alcohol; Alcohol
Chemical Name: Ethyl Alcohol

Contact Information:
Sciencelab.com, Inc.
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Houston, Texas 77396
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International Sales: **1-281-441-4400**
Order Online: ScienceLab.com
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International CHEMTREC, call: 1-703-527-3887
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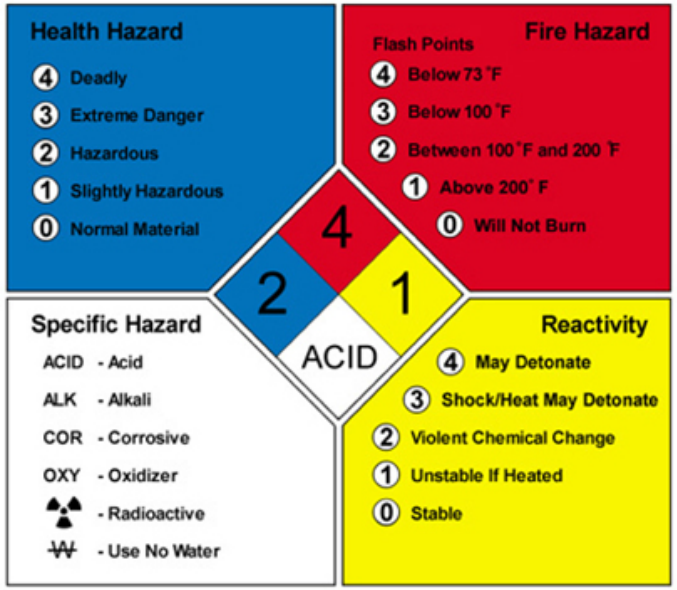
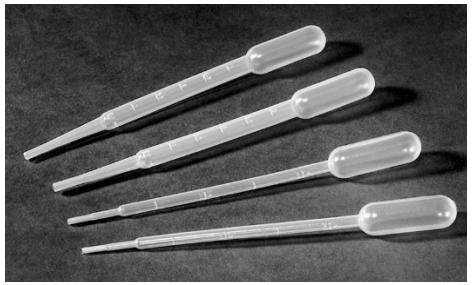


General glassware and instrument

Glassware:

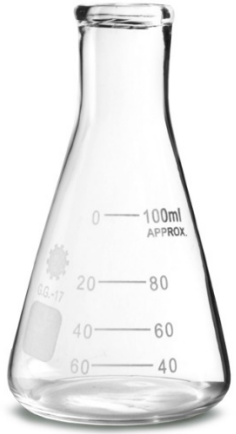


Pasteur pipette

Test tubes

Pipette

Pipette pump



Conical flask

Cuvette

instrument:

Water bath

Spectrophotometer

Electronic balance