

# PHYSICAL PHARMACY LAB. GLASSWARE REVIEW

Done By:  
**Assistant Lecturer Aqeel A. Khudhair**

A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, set against a blue gradient background.



# INTRODUCTION

**The Glassware are tools which needed to use in the laboratory to prepare, synthesis, and fabrication of material solutions and powders in different fields of sciences.**

**There are several types of laboratory glassware use for special purpose for each. We aim in this lecture to introduce a group of glassware which will be used familiarly in the physical pharmacy lab.**

## *List of important glassware used in physical pharmacy lab.*

- Beaker
- Glass rod
- Volumetric flask
- Graduated cylinder.
- Conical flask
- Burette
- Pipet
- Pipet filler
- Funnel
- Filter paper
- Separator funnel

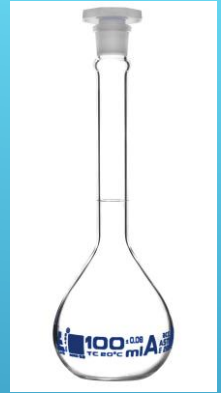
➤ Beaker:- a glass container used in mixing powders and solutions.



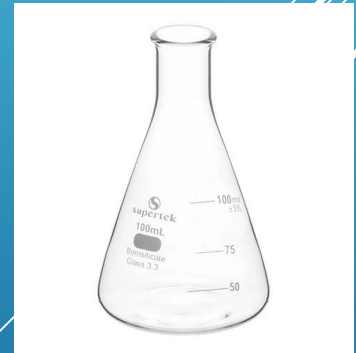
➤ Glass rod:- is a piece of laboratory equipment used to mix chemicals.



➤ Volumetric flask:- is a flat bottomed bulb with a elongated neck calibrated to hold a set volume at a mark on the neck. It is used to prepare solutions.



➤ Conical flask:- a glass container with a flat base, a wide, rounded body, and a long neck, used in titration.



- Burette:- a graduated glass tube with a small aperture and stop valve for measuring the liquid received or discharged during titration.



- Pipette:- a small piece of apparatus which typically consists of a narrow tube into which fluid is drawn by suction. it is used for transferring small volumes of liquid.



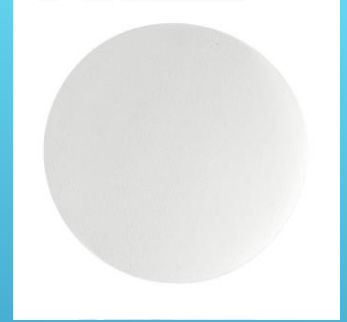
➤ Pipette filler:-is a tool used to safely draw liquids into a pipette.



➤ Funnel:- an glass tool that has a wide round opening at the top, sloping sides, and a narrow tube at the bottom, used for pouring liquids or powders into containers with narrow necks, and for filtration process.



➤ Filter paper:- is a semi-permeable paper barrier placed perpendicular to a liquid.it is used in filtration process.



➤ Separator funnel:- a globe or cylinder shaped funnel provided with a stop valve for drawing off the lower layer of a mixture of immiscible liquids.





