

IS 1997:2008

Laboratory Glassware- Burettes

A burette is a laboratory apparatus, which consists of a long, graduated glass tube, with a stopcock on its lower end. It is used in volumetric chemical analysis to measure the volume of a liquid. It is used to dispense and measure a variable amount of a chemical solution in the titration process for quantitative analysis in many industrial chemical tests.

The Indian standard developed by Bureau Of Indian Standard IS 1997 provides metrological and construction requirements for an internationally acceptable series of burettes, suitable for general laboratory purpose.

The accuracy of a burette is important in a laboratory because it allows for precise measurements of liquids, which is necessary for many processes. Burettes are essential for accurately measuring reagents in Analytical titrations, drug formulations, research, and manufacturing.

In titrations, every drop can significantly impact the outcome of the analysis.

IS 1997 Laboratory glassware-Burettes ensure accuracy of burettes in terms of delivery volume, delivery time and waiting time. Indian Standard specifies two classes of accuracy.

Class A(Subdivided into classes A and AS) for higher grade(High Accuracy)

Class B for the lower grade (low accuracy).

IS 1997 also specifies capacities of burettes, subdivisions and maximum permissible error.

IS 1997 ensures markings on the each burette w.r.t. unit in terms of which the burette is graduated, class of burette, waiting time, identification mark on removable parts of burette, type of glass used, maximum permissible error.