

Aim :

Determination of viscosity of liquid using ostwald viscometer.

Reference :Requirements :-

(a) Apparatus :- Ostwald viscometer, Measuring cylinder, Pipette, beaker, burette stand.

(b) Glassware :- Ost

Chemicals :- Benzene, toluene, distilled water.

Theory :-

Viscosity is the measure of resistance to flow. Resistance is the internal friction of moving liquid layers. Fluid with large viscosity has more internal friction. Fluids with less viscosity have low internal friction. SI unit of viscosity is Pascal second. Common unit of viscosity is poise (p).

$$1 \text{ Pa.s} = 1 \text{ p}$$

Teacher's Signature _____

Procedure:

- (i) Wash and dry each glassware.
- (ii) Take 50% v/v of benzene and toluene in a beaker.
- (iii) Mix it well and put it in ostwald viscometer and fill it at the marking level by closing one end of viscometer.
- (iv) Release the closed end of viscometer and measure the time
- (v) Take the reading atleast three time and calculate average viscosity.

Result:

Determination of viscosity of given liquid has been successfully determined in the laboratory.