

PHARMACEUTICAL CHEMISTRY

EXPERIMENT NO -21

OBJECT: To perform assay of hydrogen peroxide solution (20 volume) IP 1996.

REFERENCE

Parle A., "Pharmaceutical chemistry I Laboratory Manual", CBS Publishers and distributors Pvt. Ltd, Ed Ist, 2008, pp 109-110.

STANDARDS

Hydrogen peroxide solution (20 vol.) contains not less than 5% w/v and nmt 7% w/v of H₂O₂ corresponding to about 20 times its volume of available oxygen.

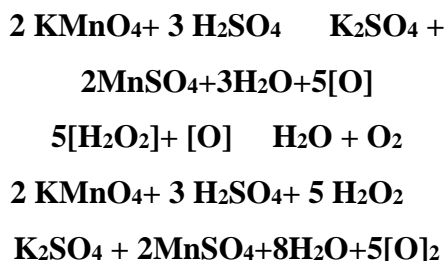
REQUIREMENTS

Chemical required: H₂O₂ , potassium iodide, 1 M sulphuric acid, 0.02 M potassium permanganate.

Apparatus required: conical flask, burette, pipette, beaker, etc.

THEORY

This is an oxidation-reduction titration of permanganometry.



PROCEDURE

Rinse the pipette with the dil. Hydrogen peroxide solution. Using pipette transfer 1 ml of dil. Hydrogen peroxide solution to dry and clean conical flask. Add 20 ml of 1 M sulphuric acid. Rinse the burette with 0.002 M potassium permanganate and fill it with this on up to zero mark. Titrate it with potassium permanganate solution until the solution become pink. Note the burette reading.

RESULT:

The percentage purity of H₂O₂ in the given sample of iodine is % w/v.