

Experiment

Assay of Atropine

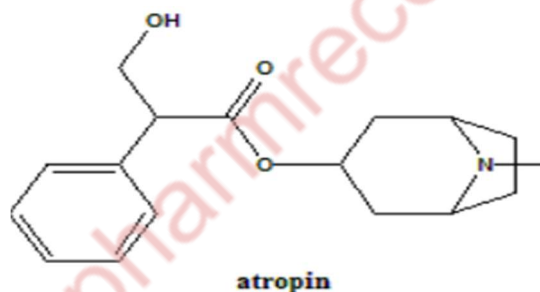
Aim;- To perform the Assay of Atropine.

Reference;- Indian Pharmacopoeia, 2007, The Indian Pharmacopoeia Commission, Ghaziabad, Volume 2, page 135-136.

Requirement;-

-  **Chemicals-** Atropine sulphate, Potassium hydrogen phthalate, Perchloric acid, Glacial acetic acid, Crystal violet
-  **Glassware-** beaker, conical flask, Volumetric flask, Measuring cylinder, Glass rod, burette.

Theory;- Atropine is a tropane alkaloid and anticholinergic medication used to treat certain types of nerve agent and pesticide poisonings as well as some types of slow heart rate, and to decrease saliva production during surgery. It was first isolated in 1833, It is on the World Health Organization's List of Essential Medicines. Atropine brand name are Atropine Care, Isopto Atropine, Ocu-Tropine.



Procedure;-

1. Accurately 0.5g weighed out and dissolved in 30 ml of anhydrous glacial acetic acid.
2. Then titrate with 0.1 M perchloric acid and the end point determined potentiometrically.
3. After blank titration are carried out.

Factor;-

1 ml of 0.1M perchloric acid is equivalent to 0.06768 g of (C₁₇H₂₃NO₃), H₂SO₄.

Calculation;-

% purity of Atropine = volume of titrant x molarity x equivalent factor (wt of sample x 100).

Result;- The % purity of Atropine was found to be