

## ASPIRIN TABLETS- BY LIPSA SAMAL

### Identification

Boil a quantity of the powdered tablets containing 0.5 g of Aspirin with 10 ml of *sodium hydroxide solution* for 3 minutes, cool and add 10 ml of *dilute sulphuric acid*; a white, crystalline precipitate is produced and the odour of acetic acid is perceptible. Filter, dissolve the precipitate in about 2 ml of *water* and add *ferric chloride test solution*; a **deep violet**

**colour** is produced.

**Assay.** Weigh and powder 20 tablets. Weigh accurately a quantity of the powder containing about 0.5 g of Aspirin, add 30.0 ml of *0.5 M sodium hydroxide*, boil gently for 10 minutes, cool and titrate the excess of alkali with *0.5 M hydrochloric acid* using *phenol red solution* as indicator. Repeat the operation without the substance under examination. The difference between the titrations represents the amount of sodium hydroxide required.

**1 ml of 0.5 M sodium hydroxide is equivalent to 0.04504 g of C<sub>9</sub>H<sub>8</sub>O<sub>4</sub>.**

**Principle-** Titrametric method (acid-base titration)