ASSAY OF PARACETAMOL TABLETS

Acetaminophen (C8H9NO2) (B.P. 2000)

Procedure:

1. Weigh and powder 20 tablets.
2. Take a quantity of the powder equivalent to 0.15 g of paracetamol

20 tablets \* 0.5g paracetamol🡪 wt 0.15 g paracetamol 🡪 X

1. Place in a volumetric flask (200ml)
2. Add *50 ml 0.1 M NaOH* (using a burette)
3. Dilute with *100 ml of water*, shake for 15 minutes, and add sufficient water to produce 200 ml. Mix, and filter
4. Dilute 10 ml of the filtrate to 100 ml with water (in a volumetric flask 100ml).
5. Add 10ml of the resulting solution to 10 ml of *0.1 M NaOH*, dilute to 100 ml with water (in a volumetric flask 100ml)
6. Measure the absorbance of the resulting solution at  max = 257 nm taking 0.715 as the value of E1%.

Blank:

take 20 ml of 0.1 M NaOH and complete to 100 ml with water

Limit:

Content: 95-105% of the prescribed (labeled) amount.

ASSAY OF INDOCID CAPSULE

Indomethacin (C19H16C1NO4) (B.P. 1980)

Procedure:

1. To a quantity of the mixed contents of 20 capsules equivalent to 50 mg of Indomethacin, add 10 ml of water in a vol. flask 100ml.
2. Stand for 10 minutes, swirling occasionally.
3. Add 75 ml of methanol shake well and add sufficient methanol to produce 100 ml and filter if necessary.
4. To 5 ml of the filtrate, add sufficient of a mixture of equal volumes of methanol and phosphate buffer (pH 7.2) to produce 100 ml in a vol. flask.
5. Measure the absorbance of the resulting solution at max = 318 nm.
6. Calculate the content of Indomethacin, taking 0.193 as the value of E1%.

Limit:

90-110 % of the labeled amount.

ASSAY OF ASPIRIN TABLETS

Acetyl salicylic acid (C9H8O4) (B.P. 2000)

*Aspirin + NaoH Sodium acetate + Salicylic acid + excess NaoH* Procedure:

* 1. Weigh and powder 20 tablets.
  2. Take a quantity of the powder containing 0.5 g aspirin

20 tablets \* 0.3 g aspirin W 0.5 g aspirin X

1. Place in a conical flask
2. Add 30 ml 0.5 M NaOH (using a burette)
3. Boil gently for 10 minutes. Cover the flask to prevent evaporation. Cool.
4. Titrate the excess of alkali with 0.5 M HCl using Phenol Red indicator.
5. End point: Red (violet in alkaline medium)🡪yellow (in acidic medium).
6. Repeat the same procedure without the substance being examined (blank)
7. i.e. Boil 30 ml 0.5 M NaOH for 10min. 🡪 Cool🡪 Titrate with 0.5 M HCl.
8. The difference between the two titrations represents the amount of sodium hydroxide consumed to change Aspirin to sodium acetate and salicylic acid.

\* F = Each ml of 0.5 M NaOH is equivalent to 0.04504 g of C9H8O4.

Limit:

Content of Aspirin: 95-105% of the prescribed (labeled) amount.