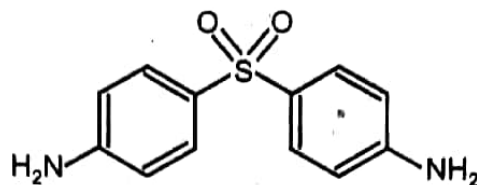


## Experiment No. 10

**Aim:** To carry out the assay of Dapsone Tablet IP.



### Requirements:

### Apparatus:

Volumetric flask, Measuring cylinder, Analytical balance, Weight box, Beaker, Burette and Conical flask.

### Chemicals:

Sodium nitrite, Hydrochloric acid and Dapsone tablets.

### Principle:

Assay of dapsone involves diazotization titration. Primary aromatic amines react with sodium nitrite in acid solution to form diazonium salts. The end point in this titration method is located by using starch iodide paste as indicator. A small amount of iodide included in the titration mixture is converted to iodine by excess of nitrous acid, this is detected using starch indicator.

### Procedure:

- Weigh and powder 20 tablets of Dapsone.
- Weigh accurately a quantity of the powder equivalent to 0.25 g of dapsone and dissolve in mixture of 15 ml of water and 15 ml of 2 M hydrochloric acid.
- Cool the solution to about 15°C.
- Carry out the nitrite titration.
- Perform a blank determination.
- Each ml of 0.1M sodium nitrite is equivalent to 0.01242 g of  $C_{12}H_{12}N_2O_2S$ .

### Result:

The given sample contains ..... mg of dapsone.