

SCHEDULE 2

METHODS OF ANALYSIS

11.

DETERMINATION OF WATER-SOLUBLE POTASSIUM

Determination

7.2 Transfer by pipette an aliquot part of the filtrate containing 25 -50 mg of potassium (see Table on page 72) into a 250 ml beaker; make up to 50 ml with water.

To remove interferences, add 10 ml of the EDTA solution (4.5), several drops of the phenolphthalein solution (4.4) and stir in, drop by drop, sodium hydroxide solution (4.3) until it turns red, then finally add a few more drops of sodium hydroxide to ensure an excess (usually 1 ml of sodium hydroxide is sufficient to neutralise the sample and ensure an excess).

To eliminate most of the ammonia boil gently for 15 minutes. Add water to make the volume up to 60 ml.

Bring the solution to the boil, remove the beaker from the heat and add 10 ml formaldehyde (4.1). Add several drops of phenolphthalein solution (4.4) and if necessary, more sodium hydroxide solution until a distinct red colour appears. Cover the beaker with a watch glass and place it on a steam bath for fifteen minutes.