SCHEDULE 2

METHODS OF ANALYSIS

PART I

General

(a) (a) When two or more methods are prescribed in this part of this Schedule determine a component of a fertiliser the choice of the method shall, exceeds where otherwise indicated, be left to the agricultural analyst concerned; the method used must however be indicated in the certificate of analysis.

(b) Any reference to water in this Schedule means purified water as defined in the European Pharmacopoeia.

Reagents and Apparatus

(a) (a) All reagents used shall be of analytical quality.

(b) For the determination of any form of nitrogen, water must be free of a nitrogenous compounds and carbon dioxide.

(c) Solutions for which no solvents are prescribed must be aqueous.

(d) Only special instruments or apparatus requiring special standards a mentioned in the descriptions of the methods of analysis.

Methods of Analysis

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1. Preparation of the sample for analysis
2. Determination of ammoniacal nitrogen
   (a) (a) Determination of nitrate and ammoniacal nitrogen-Ulsch method
   (b) determination of nitrate and ammoniacal nitrogen-Arnd method
   (c) Determination of nitrate and ammoniacal nitrogen-Devarda method
   (a) (a) Determination of nitrogen in calcium cyanamide-in the absence of nitrate
   (b) Determination of nitrogen in calcium cyanamide-in the presence of nitrate
5. Determination of total nitrogen in urea
6. Determination of cyanamide nitrogen
7. Determination of biuret in urea
   (a) (a) Determination of different forms of nitrogen-in the presence of cyanamide nitrogen
   (b) Determination of different forms of nitrogen-in the absence of cyanamide nitrogen
   (a) (a) Extraction of total phosphorus-by mineral acids
   (b) Extraction of phosphorus-by 2% formic acid
   (c) Extraction of phosphorus-by 2% citric acid
   (d) Extraction of phosphorus-by neutral ammonium citrate
   (e) Extraction of phosphorus-by alkaline ammonium citrate (Petermann’s method) at 65°C

(f) Extraction of phosphorus-by alkaline ammonium citrate (Petermann's method) at ambient temperature

(g) Extraction of phosphorus-by alkaline ammonium citrate (Joulie's method)

(h) Extraction of phosphorus-by water

10. Determination of extracted phosphorus

11. Determination of water-soluble potassium

(a) (a) Determination of water-soluble magnesium-atomic absorption spectro-photometric method

(b) Determination of water-soluble magnesium-EDTA method

(a) (a) Determination of total magnesium-atomic absorption spectrophoto-metric method

(b) Determination of total magnesium-EDTA method

14. Determination of chlorides, in the absence of organic matter

(a) (a) Determination of fineness of grinding—dry method

(b) Determination of fineness of grinding-for soft natural phosphates

16. Methods of analysis and test procedures for ammonium nitrate fertiliser containing more than 28% nitrogen by weight

A. Methods for the application of thermal cycles

B. Determination of oil retention

C. Determination of the combustible ingredients

D. Determination of the pH value

E. Determination of particle size

F. Determination of the chloride content (as chloride ion)

G. Determination of copper