SCHEDULE 2

METHODS OF ANALYSIS

PART II

8.

DETERMINATION OF TOTAL MAGNESIUM

EXTRACTION OF TOTAL MAGNESIUM

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1 SCOPE AND FIELD OF APPLICATION

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1.1 This method is applicable to all fertilisers.

2 PRINCIPLE

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2.1 Solubilisation by boiling in dilute hydrochloric acid.

3 REAGENTS

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3.1 Diluted hydrochloric acid:

One volume of hydrochloric acid (d = 1.18) plus one volume of water.

4 APPARATUS

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4.1 Electric hot plate with adjustable temperature.

5 PREPARATION OF THE SAMPLE

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5.1 See Method 1.

6 PROCEDURE

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Test sample

6.1 Magnesium is extracted from a test sample of five grams weighed to within one milligram.

Preparation of the solution

6.2 Add approximately 400 millilitres of water and, taking care when the sample contains a significant quantity of carbonates, 50 millilitres of dilute hydrochloric acid (4.1) a small amount at a time. Bring to the boil and maintain for 30 minutes. Allow to cool, stirring occasionally. Decant quantitatively into a 500 millilitre graduated flask. Make up to volume with water, and mix. Pass through a dry filter into a dry container, discarding the initial portion. The extract must be completely transparent. Stopper if the filtrate is not used immediately.