

ICS 65.080

English Version

Fertilizers - Extraction of phosphorus soluble in 2 % citric acid

Engrais - Extraction du phosphore soluble dans l'acide
citrique à 2 %

Düngemittel - Extraktion des in 2%iger Citronensäure
löslichen Phosphors

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Contents

Page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Sampling	4
5 Principle	4
6 Reagents	4
7 Apparatus	5
8 Procedure	5
Bibliography	6

Foreword

This document (CEN/TS 15920:2009) has been prepared by Technical Committee CEN/TC 260 "Fertilizers and liming materials", the secretariat of which is held by DIN.

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1 Scope

This document specifies the procedure for the determination of phosphorus soluble in 2 % citric acid (20 g per litre).

The method is applicable only to types of basic slag (see [1], Annex I A).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1482-2, *Fertilizers and liming materials — Sampling and sample preparation — Part 2: Sample preparation*

EN 12944-1:1999, *Fertilizers and liming materials and soil improvers — Vocabulary — Part 1: General terms*

EN 12944-2:1999, *Fertilizers and liming materials and soil improvers — Vocabulary — Part 2: Terms relating to fertilizers*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12944-1:1999 and EN 12944-2:1999 apply.

4 Sampling

Sampling is not part of the method specified in this document. A recommended sampling method is given in EN 1482-1.

Sample preparation shall be carried out in accordance with EN 1482-2. Grinding is recommended for homogeneity reasons.

5 Principle

Extraction of phosphorus from the sample with a 2 % citric acid solution (20 g/l) under specified conditions.

6 Reagents

6.1 Water, distilled or demineralized.

6.2 2 % citric acid solution, $\rho = 20$ g/l, prepared from crystallized citric acid ($\text{C}_6\text{H}_8\text{O}_7 \cdot \text{H}_2\text{O}$).

Verify the mass concentration of the citric acid solution by titrating 10 ml of the latter with a sodium hydroxide standard solution, $c = 0,1$ mol/l, using phenolphthalein as indicator.

If the solution is correct 28,55 ml of the standard solution should be used.