

**Väetised. 2%-lises sidrunhappes lahustuva fosfori eraldamine**

Fertilizers - Extraction of phosphorus soluble in 2 % citric acid

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15920:2011 sisaldab Euroopa standardi EN 15920:2011 ingliskeelset teksti.

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Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 08.06.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15920:2011 consists of the English text of the European standard EN 15920:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.06.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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## 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

This European Standard was approved by CEN on 29 April 2011.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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## Foreword

This document (EN 15920:2011) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 15920:2009.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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## 1 Scope

This European Standard specifies the procedure for the determination of phosphorus soluble in 2 % citric acid (20 g/l).

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*

CEN/TS 15959, *Fertilizers — Determination of extracted phosphorus*

## 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.