

**Väetised. Erinevates vormides esineva üldväävl
eraldamine**

Fertilizers - Extraction of total sulfur present in various forms

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15925:2011 sisaldab Euroopa standardi EN 15925:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.10.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 28.09.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15925:2011 consists of the English text of the European standard EN 15925:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.10.2011 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 total sulfur present in various forms

Engrais - Extraction du soufre total présent sous différentes formes

Düngemittel - Extraktion von Gesamtschwefel, der in verschiedener Form vorliegen kann

This European Standard was approved by CEN on 18 August 2011.

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Foreword

This document (EN 15925:2011) 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of an identical text or by endorsement, at the latest by March 2012, and conflicting national standards shall be withdrawn at the latest by March 2012.

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 15925:2009.

The following changes have been made to the former edition:

- a) the CEN Technical Specification has been adopted as a European Standard;
- b) Clause 9 "Test report" has been added;
- c) the document has been editorially revised.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This document specifies a method for the extraction of the total sulfur contained in fertilizers in elemental form and/or in other chemical combinations.

The method is applicable to EC fertilizers for which a declaration of the total sulfur present in various forms (elemental, thiosulfate, sulfite, sulfate) is provided.

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*

EN 15749, *Fertilizers — Determination of sulfates content using three different methods*

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

Elemental sulfur is converted in an alkaline medium into polysulfides and thiosulfate; these, together with any sulfites that can be present, are then oxidized with hydrogen peroxide. The various forms of sulfur are thus converted into sulfate that is determined by precipitation of barium sulfate.

6 Reagents

Use only reagents of recognized analytical grade and distilled or demineralized water.

6.1 Diluted hydrochloric acid.

Mix one volume of hydrochloric acid ($d = 1,18$) with one volume of water.

6.2 Sodium hydroxide solution, NaOH 30 % minimum, $d = 1,33$.