

**Väetised. Elementaarse väevli eraldamine ja määramine**

**Fertilizers - Extraction and determination of elemental sulfur**

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English Version

**Fertilizers - Extraction and determination of elemental sulfur**

Engrais - Extraction et dosage du soufre élémentaire

Düngemittel - Extraktion und Bestimmung von  
elementarem Schwefel

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

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## Foreword

This document (EN 16032:2011) 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of an identical text or by endorsement, at the latest by May 2012, and conflicting national standards shall be withdrawn at the latest by May 2012.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 16032:2010.

The following has been added to the former edition of the European Standard:

- a) the CEN Technical Specification has been adopted as a European Standard;
- b) 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 European Standard specifies a method for extraction and determination of the elemental sulfur contained in fertilizers.

The method is applicable to EC fertilizers for which a declaration of the total sulfur in elemental form is provided for in Regulation (EC) Nr 2003/2003, Annex I [1].

## 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 Principle

After the removal of soluble compounds, elemental sulfur is extracted by using carbon disulfide, followed by gravimetric determination of the sulfur extracted.

**WARNING** — This method of analysis involves the use of carbon disulfide (CS<sub>2</sub>). Special safety measures shall therefore be taken, in particular with regard to:

- the storage of CS<sub>2</sub>;
- protective equipment for staff;
- occupational hygiene;
- prevention of fire and explosions;
- disposal of the reagent.

This method requires a highly skilled staff and a suitably equipped laboratory.

## 5 Sampling and sample preparation

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