

ICS 65.080

English Version

Fertilizers - Extraction and determination of elemental sulfur

Engrais - Extraction et dosage du soufre élémentaire

Düngemittel - Extraktion und Bestimmung von
elementarem Schwefel

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Foreword

This document (CEN/TS 16032:2010) 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 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 (CS₂). Special safety measures shall therefore be taken, in particular with regard to:

- the storage of CS₂,
- 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.