

ICS 65.080

English Version

## Fertilizers - Extraction of water soluble sulfur where the sulfur is in various forms

Engrais - Extraction du soufre soluble dans l'eau, lorsque le  
soufre est présent sous différentes formes

Düngemittel - Extraktion von wasserlöslichem Schwefel,  
der in verschiedener Form vorliegen kann

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## Foreword

This document (CEN/TS 15926:2009) 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 a method for the extraction of water-soluble sulfur contained in fertilizers in various forms.

The method is applicable to EC-fertilizers for which a declaration of the water-soluble sulfur trioxide is provided for.

## 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 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 Principle

The sulfur is dissolved in cold water and converted into sulfate by oxidation with hydrogen peroxide in an alkaline medium.

## 5 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 of the laboratory sample is recommended for homogeneity reasons.

## 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,  $w = 37\%$ , with one volume of water.

### 6.2 Sodium hydroxide solution, $w = 30\%$ to $32\%$ .