## TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE

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### **CEN/TS 15960**

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#### **English Version**

# Fertilizers - Extraction of total calcium, total magnesium, total sodium and total sulfur in the forms of sulfates

Engrais - Extraction du calcium total, du magnésium total, du sodium total et du soufre total présent sous forme de sulfate Düngemittel - Extraktion von Gesamtcalcium, Gesamtmagnesium und Gesamtnatrium sowie von Gesamtschwefel in Form von Sulfat

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#### **Foreword**

This document (CEN/TS 15960:2009) 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 Technical Specification specifies a method for the extraction of total calcium, total magnesium and total sodium and for the extraction of total sulfur present in the form of sulfates, so that the same extract may be used for the determination of each nutrient required.

The method is applicable to fertilizers listed in Regulation (EC) 2003/2003, Annex I (see [1]), for which a declaration of total calcium, total magnesium, total sodium, and total sulfur in the form of sulfates is provided for in this Regulation.

#### 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

Extraction of the magnesium, sodium and sulfur present in the form of sulfates in the fertilizer by boiling in diluted hydrochloric acid under the specified conditions.

#### 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

- **6.1 Water**, distilled or demineralized.
- **6.2 Diluted hydrochloric acid,** mix one volume of hydrochloric acid,  $\rho$  = 1,18 g/ml, with one volume of water.