VÄETISED. VEES LAHUSTUVA KALTSIUMI, MAGNEESIUMI, NAATRIUMI JA SULFAATIDE VORMIS VÄÄVLI ERALDAMINE

Fertilizers - Extraction of water-soluble calcium, magnesium, sodium and sulfur in the form of sulfates



# EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

	This Estonian standard EVS-EN 15961:2017 consists of the English text of the European standard EN 15961:2017.	
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.	
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# EUROPEAN STANDARD NORME EUROPÉENNE

# EUROPÄISCHE NORM

January 2017

EN 15961

ICS 65.080

Supersedes EN 15961:2011

## **English Version**

# Fertilizers - Extraction of water-soluble calcium, magnesium, sodium and sulfur in the form of sulfates

Engrais - Extraction des formes solubles dans l'eau du calcium, du magnésium, du sodium et du soufre sous forme de sulfate

Düngemittel - Extraktion von wasserlöslichem Calcium, Magnesium und Natrium sowie von Schwefel in Form von Sulfat

This European Standard was approved by CEN on 9 November 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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# **European foreword**

This document (EN 15961:2017) 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of an identical text or by endorsement, at the latest by July 2017 and conflicting national standards shall be withdrawn at the latest by July 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 15961:2011.

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

The following changes have been made to the former edition:

- a) procedure for the preparation of the solution (8.2) technically revised;
- b) editorially revised.

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

# 1 Scope

This European Standard specifies a method for the extraction of water-soluble calcium, magnesium, sodium and sulfur (in the form of sulfates), so that the same extract can be used for the determination of each nutrient required.

The method is solely applicable to fertilizers listed in Regulation (EC) 2003/2003, Annex I [2]), for which a declaration of the water-soluble calcium, magnesium, sodium, and sulfur (in the form of sulfates) is provided for in this Regulation.

# 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 calcium, magnesium, sodium, and sulfur (present in the form of sulfates) in the fertilizer by boiling in water 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 [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.