

Väetised. Kloriidide määramine orgaanilise aine puudumisel

Fertilizers - Determination of chlorides in the absence of organic material

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 16195:2012 sisaldab Euroopa standardi EN 16195:2012 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.11.2012 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 14.11.2012.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 16195:2012 consists of the English text of the European standard EN 16195:2012.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2012 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 14.11.2012.

The standard is available from Estonian standardisation organisation.

ICS 65.080

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English Version

Fertilizers - Determination of chlorides in the absence of organic material

Engrais - Dosage des chlorures en l'absence de matières organiques

Düngemittel - Bestimmung von Chlorid bei Abwesenheit organischer Stoffe

This European Standard was approved by CEN on 6 October 2012.

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Foreword

This document (EN 16195:2012) 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of an identical text or by endorsement, at the latest by May 2013, and conflicting national standards shall be withdrawn at the latest by May 2013.

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 16195:2011.

The following changes have been made to the former edition:

- 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 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies a method for the determination of chlorides in the absence of organic material. The method is applicable to all fertilizers which are free from organic material.

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

The chlorides, dissolved in water, are precipitated in an acid medium by an excess of standard solution of silver nitrate. The excess is titrated with a solution of ammonium thiocyanate in the presence of ferric ammonium sulfate (Volhard's method).

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 recognised analytical grade.

6.1 Water, distilled or demineralised and free from chlorides.

6.2 Nitrobenzene or diethyl ether.

6.3 Nitric acid, $c = 10 \text{ mol/l}$.

6.4 Indicator solution.

Dissolve 40 g of ferric ammonium sulfate $\text{Fe}_2(\text{SO}_4)_3 \cdot (\text{NH}_4)_2\text{SO}_4 \cdot 24\text{H}_2\text{O}$, in water and make up to 1 l.