

ICS 65.080

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

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## Foreword

This document (CEN/TS 16195:2011) 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 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 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

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 recognized analytical grade.

**6.1 Water**, distilled or demineralized 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.