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STN P	**Anorganické hnojivá** **Stanovenie špecifických živín**	**STN P** **CEN/TS 17757** 65 5006

Inorganic fertilizers - Determination of specific nutrients

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/22

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TECHNICAL SPECIFICATION
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CEN/TS 17757

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ICS 65.080

English Version

Inorganic fertilizers - Determination of specific nutrients

Engrais inorganiques - Détermination des éléments nutritifs spécifiques

Anorganische Düngemittel - Bestimmung spezifischer Nährstoffe

This Technical Specification (CEN/TS) was approved by CEN on 13 March 2022 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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

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Ref. No. CEN/TS 17757:2022 E

Contents

Page

European foreword

This document (CEN/TS 17757:2022) 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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Introduction

Regulation (EU) 2019/1009 [1] lays down the rules on the making available on the market of EU fertilizing products and the specific safety and quality requirements for the defined product function categories (PFCs). Inorganic fertilizers have been classified into PFC 1(C).

The specific safety and quality requirements in relation to the following specific nutrients are defined in this document as well as normative references of the test methods to be used in order to measure the compliance with the related requirement in the Regulation (EU) 2019/1009 [1].

1 Scope

This document specifies references to methods for the determination of the content of the following specific nutrients in inorganic fertilizers:

— the total nitrogen content;

— the ammoniacal nitrogen content;

— the nitric nitrogen content;

— the urea nitrogen content;

— the content of nitrogen from isobutylidenediurea (IBDU) and crotonylidenediurea (CDU);

— the cyanamide nitrogen content;

— the methylene-urea nitrogen content (and urea formaldehyde, if applicable);

— the total phosphorus content;

— the water-soluble phosphorus content;

— the neutral ammonium citrate soluble phosphorus content;

— the water-soluble potassium content;

— the total magnesium content;

— the water-soluble magnesium content;

— the total calcium content;

— the water-soluble calcium content;

— the total sulfur content;

— the water-soluble sulfur content;

— the total sodium content;

— the water-soluble sodium content.

This document is applicable to EU fertilizing products classified as PFC 1(C) and PFC 7 as long as the blend only consists of EU fertilizing products classified as PFC 1(C), PFC 2 and PFC 5 as specified in the Regulation (EU) 2019/1009 [1].

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1482-1:2007, *Fertilizers and liming materials — Sampling and sample preparation — Part 1: Sampling*

EN 1482-2:2007, *Fertilizers and liming materials — Sampling and sample preparation — Part 2: Sample preparation*

EN 1482-3:2016, *Fertilizers and liming materials — Sampling and sample preparation — Part 3: Sampling of static heaps*

EN 12944-1:1999,[1] *Fertilizers and liming materials — Vocabulary — Part 1: General terms*

EN 12944-2:1999,[2] *Fertilizers and liming materials — Vocabulary — Part 2: Terms relating to fertilizers*

EN 15475:2009, *Fertilizers — Determination of ammoniacal nitrogen*

EN 15476:2009, *Fertilizers — Determination of nitric and ammoniacal nitrogen according to Devarda*

EN 15477:2009, *Fertilizers — Determination of the water-soluble potassium content*

EN 15478:2009, *Fertilizers — Determination of total nitrogen in urea*

EN 15560:2009, *Fertilizers — Determination of total nitrogen in calcium cyanamide nitrate free*

EN 15561:2009, *Fertilizers — Determination of total nitrogen in calcium cyanamide containing nitrates*

EN 15562:2009, *Fertilizers — Determination of cyanamide nitrogen*

EN 15604:2009, *Fertilizers — Determination of different forms of nitrogen in the same sample, containing nitrogen as nitric, ammoniacal, urea and cyanamide nitrogen*

EN 15705:2010, *Fertilizers — Determination of urea condensates using high-performance liquid chromatography (HPLC) — Isobutylidenediurea and crotonylidenediurea (method A) and methylen-urea oligomers (method B)*

EN 15749:2009, *Fertilizers — Determination of sulfates content using three different methods*

EN 15750:2009, *Fertilizers — Determination of total nitrogen in fertilizers containing nitrogen only as nitric, ammoniacal and urea nitrogen by two different methods*

EN 15925:2011, *Fertilizers — Extraction of total sulfur present in various forms*

EN 15926:2011, *Fertilizers — Extraction of water soluble sulfur where the sulfur is in various forms*

EN 15956:2011, *Fertilizers — Extraction of phosphorus soluble in mineral acids*

EN 15957:2011, *Fertilizers — Extraction of phosphorus which is soluble in neutral ammonium citrate*

[1] As impacted by EN 12944-1:1999/AC:2000.
[2] As impacted by EN 12944-2:1999/AC:2000.

EN 15958:2011, *Fertilizers — Extraction of water soluble phosphorus*

EN 15959:2011, *Fertilizers — Determination of extracted phosphorus*

EN 15960:2011, *Fertilizers — Extraction of total calcium, total magnesium, total sodium and total sulfur in the forms of sulfates*

EN 15961:2017, *Fertilizers — Extraction of water-soluble calcium, magnesium, sodium and sulfur in the form of sulfates*

EN 16196:2012, *Fertilizers — Manganimetric determination of extracted calcium following precipitation in the form of oxalate*

EN 16197:2012, *Fertilizers — Determination of magnesium by atomic absorption spectrometry*

EN 16198:2012, *Fertilizers — Determination of magnesium by complexometry*

EN 16199:2012, *Fertilizers — Determination of the sodium extracted by flame-emission spectrometry*