

STN P	Anorganické hnojivá Stanovenie špecifických mikroživín	STN P CEN/TS 17754 65 5004
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Inorganic fertilizers - Determination of specific micronutrients

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

Táto predbežná slovenská technická norma je určená na overenie. Prípadné pripomienky pošlite do apríla 2024 Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

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TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 17754

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ICS 65.080

English Version

**Inorganic fertilizers - Determination of specific
micronutrients**

Engrais inorganiques - Détermination des oligo-
éléments spécifiques

Anorganische Düngemittel - Bestimmung spezifischer
Spurennährstoffe

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.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN/TS 17754:2022 (E)

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European foreword

This document (CEN/TS 17754:2022) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

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 has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

CEN/TS 17754:2022 (E)**Introduction**

Regulation (EU) 2019/1009 [2] 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 micronutrients 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 [2].

1 Scope

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

- the total boron content;
- the total cobalt content;
- the total copper and zinc content;
- the total iron content;
- the total manganese content;
- total molybdenum content;
- the water-soluble boron content;
- the water-soluble cobalt content;
- the water-soluble copper content;
- the water-soluble iron content;
- the water-soluble manganese content;
- the water-soluble molybdenum content;
- the water-soluble zinc content;
- the sum of declared micronutrients in compound micronutrient fertilizers.

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 [2].

An overview of the references to methods for the determination of the specific micronutrients is given in Table 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*

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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 16962:2018, *Fertilizers — Extraction of water soluble micro-nutrients in fertilizers and removal of organic compounds from fertilizer extracts*

EN 16963:2018, *Fertilizers — Determination of boron, cobalt, copper, iron, manganese, molybdenum and zinc using ICP-AES*

EN 16964:2018, *Fertilizers — Extraction of total micro-nutrients in fertilizers using aqua regia*

EN 16965:2018, *Fertilizers — Determination of cobalt, copper, iron, manganese and zinc using flame atomic absorption spectrometry (FAAS)*

EN 17041:2018, *Fertilizers — Determination of boron in concentrations ≤ 10 % using spectrometry with azomethine-H*

EN 17042:2018, *Fertilizers — Determination of boron in concentrations > 10 % using acidimetric titration*

EN 17043:2018, *Fertilizers — Determination of molybdenum in concentrations ≤ 10 % using spectrometry of a complex with ammonium thiocyanate*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

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

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