SLOVENSKI STANDARD
SIST-TS CEN/TS 17766:2023

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Organska in organsko-mineralna gnojila - Ekstrakcija z vodo za določevanje elementov

Organic and organo-mineral fertilizers - Extraction by water for subsequent determination of elements

Organische und organisch-mineralische Düngemittel - Extraktion durch Wasser zur anschließenden Bestimmung der Elemente

Engrais organiques et organo-minéraux - Extraction à l'eau pour le dosage ultérieur des éléments

Ta slovenski standard je istoveten z: **CEN/TS 17766:2022**

ICS:

65.080	Gnojila	Fertilizers

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TECHNICAL SPECIFICATION

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ICS 65.080

English Version

Organic and organo-mineral fertilizers - Extraction by water for subsequent determination of elements

Engrais organiques et organo-minéraux - Extraction à l'eau pour le dosage ultérieur des éléments

Organische und organisch-mineralische Düngemittel - Extraktion durch Wasser zur anschließenden Bestimmung der Elemente

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European foreword

This document (CEN/TS 17766:2022) 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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1 Scope

This document specifies a method for the extraction by water for the subsequent determination of elements.

The extracts are suitable for analysis using CEN/TS 17774.

NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same results.

The method is applicable to organic and organo-mineral fertilizers.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

4 Principle

The principle is to perform the extraction in water by shaking under the specified conditions.

5 Sampling and sample preparation

Sampling and sample preparation should be performed carefully, following the principles described in EN 1482 (all parts) with appropriate adaptations, required to account for specificities of organic and organo-mineral fertilizers.

6 Reagents

6.1 Water, distilled or demineralized.

7 Apparatus

7.1 500 ml graduated flask, e.g. Stohmann.

7.2 Rotary shaker, 35 turns per minute to 40 turns per minute.

7.3 Dry pleated filter, Phosphate free.

8 Procedure

8.1 Test portion

Weigh, to the nearest 0,001 g, 5 g of the laboratory sample and place it in a graduated flask (7.1).

8.2 Extraction

Add to the test portion in the flask 450 ml of water (6.1), the temperature of which shall be between 20 °C and 25 °C.

Shake in the rotary shaker (7.2) for 30 min.

Then make up to the mark with water, mix thoroughly by shaking and filter through a dry pleated filter (7.3).

The extracts can be kept at (4 ± 3) °C at least for two days before determination.