

<b>STN P</b>	<b>Organické a organicko-minerálne hnojivá Mineralizácia lúčavkou kráľovskou na následné stanovenie prvkov</b>	<b>STN P CEN/TS 17768</b>  65 5032
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Organic and organo-mineral fertilizers - Digestion by aqua regia for subsequent determination of elements

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.

Obsahuje: CEN/TS 17768:2022

**135062**

TECHNICAL SPECIFICATION  
SPÉCIFICATION TECHNIQUE  
TECHNISCHE SPEZIFIKATION

**CEN/TS 17768**

April 2022

ICS 65.080

English Version

**Organic and organo-mineral fertilizers - Digestion by aqua  
regia for subsequent determination of elements**

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

Organische und organisch-mineralische Düngemittel -  
Aufschluss durch Königswasser zur anschließenden  
Bestimmung der Elemente

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  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**CEN/TS 17768:2022 (E)**

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## **European foreword**

This document (CEN/TS 17768:2022) 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 17768:2022 (E)****Introduction**

Aqua regia is applied to digest different matrices for the subsequent determination of many elements. For example, a multi-matrix standard for aqua regia extraction of soils, sludges and biowaste was prepared by CEN/TC 444 "Environmental characterization". A similar procedure was applied for determination of aqua regia extractable elements according to CEN/TS 17769 and CEN/TS 17770. CEN/TC 223 "Soil improvers and growing media" published a standard for a similar procedure for soil improvers and growing media. Wide use of the aqua regia digestion, availability of the instruments and the possibility to merge the standards for different matrices in the future, were the main reasons for also applying this method of digestion for organic and organo-mineral fertilizers.

## **1 Scope**

This document specifies the procedure for the digestion of different organic fertilizers and organo-mineral fertilizers with aqua regia to enable a subsequent determination of elements.

The extracts are suitable for analysis using CEN/TS 17770 and CEN/TS 17769.

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.

## **2 Normative references**

There are no normative references in this document.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**