ICS 65.080 PREDBEŽNÁ SLOVENSKÁ TECHNICKÁ NORMA November 2017

| STN P | **Priemyselné hnojivá<br>Stanovenie molybdénu v koncentráciách väčších ako 10 % gravimetrickou metódou s 8-hydroxychinolínom** | **STN P<br>CEN/TS 17060**<br><br>65 4940 |
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Fertilizers - Determination of molybdenum in concentrations > 10 % using a gravimetric method with 8-hydroxyquinoline

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. 10/17

Táto predbežná STN je určená na overenie. Pripomienky zasielajte ÚNMS SR najneskôr do mája 2019.

Obsahuje: CEN/TS 17060:2017

**125524**

# TECHNICAL SPECIFICATION
# SPÉCIFICATION TECHNIQUE
# TECHNISCHE SPEZIFIKATION

**CEN/TS 17060**

May 2017

ICS 65.080

English Version

# Fertilizers - Determination of molybdenum in concentrations > 10 % using a gravimetric method with 8-hydroxyquinoline

Engrais - Dosage du molybdène dans des concentrations > 10 % en utilisant une méthode gravimétrique à la 8-hydroxyquinoléine

Düngemittel - Bestimmung von Molybdän in Konzentrationen > 10 % durch Gravimetrie mit 8-Hydroxychinolin

This Technical Specification (CEN/TS) was approved by CEN on 3 March 2017 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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## European foreword

This document (CEN/TS 17060:2017) 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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This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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# Introduction

The preparation of this document by CEN is based on a mandate by the European Commission and the European Free Trade Association (Mandate M/335), concerning the modernization of methods of analysis on fertilizers in the framework of Regulation (EC) No 2003/2003 [1].

This document is part of a modular approach and concerns the analytical measurement step. “Modular” means that a test standard concerns a specific step in assessing a property and not the whole chain of measurements.

Determination of molybdenum in fertilizers can be executed by inductively coupled plasma-atomic emission spectrometry (ICP-AES) according to prEN 16963:2016. The gravimetric determination as molybdenyl oxinate is more labour intensive and skill demanding but it is an option when ICP-AES is not available.

**WARNING — Persons using this European Technical Specification should be familiar with normal laboratory practice. This European Technical Specification does not purport to address all of the safety issues, if any, associated with its use. It is the responsibility of the user to establish appropriate health and safety practices and to ensure compliance with any national regulatory conditions.**

**IMPORTANT — It is absolutely essential that tests conducted according to this European Technical Specification are carried out by suitably trained staff.**

## 1 Scope

This Technical Specification specifies a method for the determination of total and water extractable molybdenum in mineral fertilizers containing more than 10 % molybdenum.

This method is applicable to water and aqua regia fertilizer extracts obtained according to prEN 16962:2016 and/or prEN 16964:2016.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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, *Fertilizers and liming materials and soil improvers - Vocabulary - Part 1: General terms*

EN 12944-2, *Fertilizers and liming materials and soil improvers - Vocabulary - Part 2: Terms relating to fertilizers*

prEN 16962:2016, *Fertilizers — Extraction of water soluble micro-nutrients in fertilizers and removal of organic compounds from fertilizer extracts*

prEN 16964:2016, *Fertilizers — Extraction of total micro-nutrients in fertilizers and removal of organic compounds from fertilizer extracts*

EN ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

ISO 4793, *Laboratory sintered (fritted) filters — Porosity grading, classification and designation*