

<b>STN</b>	<p style="text-align: center;"><b>Priemyselné a vápenaté hnojivá Stanovenie arzénu metódou atómovej emisnej spektrometrie s indukčne viazanou plazmou (ICP-AES) po rozpustení v lúčavke kráľovskej</b></p>	<p style="text-align: center;"><b>STN EN 16317+A1</b></p>
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Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnrožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 16317:2013+A1**

February 2017

ICS 65.080

English Version

**Fertilizers and liming materials - Determination of arsenic  
 by inductively coupled plasma-atomic emission  
 spectrometry (ICP-AES) after aqua regia dissolution**

Engrais et amendements minéraux basiques -  
 Détermination de l'arsenic par spectrométrie  
 d'émission atomique avec plasma induit par haute  
 fréquence (ICP-AES) après digestion à l'eau régale

Düngemittel und Kalkdünger - Bestimmung von Arsen  
 mit Atomemissionsspektrometrie mit induktiv  
 gekoppeltem Plasma (ICP-AES) nach  
 Königswasseraufschluss

This European Standard was approved by CEN on 29 August 2013 and includes Amendment 1 approved by CEN on 11 December 2016.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## **European foreword**

This document (EN 16317:2013+A1:2017) has been prepared by Technical Committee CEN/TC 260 "Fertilizers and liming materials", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

This document includes Amendment 1 approved by CEN on 11 December 2016.

This document supersedes **[A<sub>1</sub>] EN 16317:2013 **[A<sub>1</sub>]****.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **[A<sub>1</sub>] **[A<sub>1</sub>]****.

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## 1 Scope

⇒ This European Standard specifies a method for the determination of the content of arsenic in fertilizers and liming materials using inductively coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution. ↗ Limits of quantification are dependent on the sample matrix as well as on the instrument, but can roughly be expected to be 1,5 mg/kg for As.

⇒ NOTE The term fertilizer is used throughout the body of this European Standard and includes liming materials unless otherwise indicated. ↗

## 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 12944-1:1999, *Fertilizers and liming materials and soil improvers - Vocabulary - Part 1: General terms*

EN 12944-2:1999, *Fertilizers and liming materials and soil improvers - Vocabulary - Part 2: Terms relating to fertilizers*

⇒ EN 12944-3:2001, *Fertilizers and liming materials and soil improvers — Vocabulary — Part 3: Terms relating to liming materials* ↗

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

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