

STN	Priemyselné hnojivá. Stanovenie stopových prvkov. Stanovenie kadmia, chrómu, olova a niklu atómovou emisnou spektrometriou s indukčne viazanou plazmou (ICP-AES) po rozpustení v lúčavke kráľovskej.	STN EN 16319+A1 65 4912
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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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English Version

**Fertilizers and liming materials - Determination of
cadmium, chromium, lead and nickel by inductively
coupled plasma-atomic emission spectrometry (ICP-AES)
after aqua regia dissolution**

Engrais et amendements minéraux basiques -
Détermination du cadmium, chrome, plomb et nickel
par spectrométrie d'émission atomique avec plasma
induit par haute fréquence (ICP-AES) après digestion à
l'eau régale

This European Standard was approved by CEN on 15 September 2013 and includes Amendment 1 approved by CEN on 7 November 2015.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 16319:2013+A1:2015) 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of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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This document includes Amendment 1 approved by CEN on 2015-11-07.

This document supersedes A1 EN 16319:2013 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

A1 *deleted text* A1

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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1 Scope

^{A1} This European Standard specifies a method for the determination of the content of cadmium, chromium, nickel and lead in fertilizers and liming materials using inductively coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution. ^{A1} Limits of quantification are dependent on the sample matrix as well as on the instrument, but can roughly be expected to be 0,3 mg/kg for Cd and 1 mg/kg for Cr, Ni and Pb.

^{A1} NOTE 1 ^{A1} Due to significant interference from Cu, Fe and Mn, no valid results can be reported using this method for fertilizer matrices containing high concentrations ($\geq 10\%$) of these micro-nutrients.

^{A1} NOTE 2 The term fertilizer is used throughout the body of this European Standard and needs to be taken to include liming materials unless otherwise indicated. ^{A1}

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*

^{A1} EN 12944-3:2001, *Fertilizers and liming materials — Vocabulary — Part 3: Terms relating to liming materials* ^{A1}

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