

STN	Kvalita pôdy Stanovenie výmennej acidity použitím roztoku chloridu bárnatého ako extraktu (ISO 14254: 2018)	STN EN ISO 14254 46 5243
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Soil quality - Determination of exchangeable acidity using barium chloride solution as extractant (ISO 14254:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Soil quality - Determination of exchangeable acidity using barium chloride solution as extractant (ISO 14254:2018)

Qualité du sol - Détermination de l'acidité échangeable dans des extraits au chlorure de baryum (ISO 14254:2018)

Bodenbeschaffenheit - Bestimmung der Austauschacidität unter Verwendung einer Bariumchloridlösung als Extraktionsmittel (ISO 14254:2018)

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EN ISO 14254:2018 (E)

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European foreword

This document (EN ISO 14254:2018) has been prepared by Technical Committee ISO/TC 190 "Soil quality" in collaboration with Technical Committee CEN/TC 444 "Test methods for environmental characterization of solid matrices" the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by November 2018, and conflicting national standards shall be withdrawn at the latest by November 2018.

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.

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Endorsement notice

The text of ISO 14254:2018 has been approved by CEN as EN ISO 14254:2018 without any modification.

INTERNATIONAL STANDARD

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Second edition
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Soil quality — Determination of exchangeable acidity using barium chloride solution as extractant

*Qualité du sol — Détermination de l'acidité échangeable dans des
extraits au chlorure de baryum*



Reference number
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ISO 14254:2018(E)**Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 190, *Soil quality*, Subcommittee SC 3, *Chemical methods and soil characteristics*.

This second edition cancels and replaces the first edition (ISO 14254:2001), which has been technically revised.

Soil quality — Determination of exchangeable acidity using barium chloride solution as extractant

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

IMPORTANT — It is absolutely essential that tests, conducted in accordance with this document, be carried out by suitably qualified staff.

1 Scope

This document specifies a method for the determination of exchangeable acidity in barium chloride extracts of soil samples obtained according to ISO 11260.

The procedure described herein mainly concerns the determination of total exchangeable acidity by means of a fixed pH end point titration.

Two additional and optional procedures are given, describing respectively, determinations of free H⁺ acidity and aluminium in the extracts.

This document is applicable to all types of air dry soil samples.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 11260, *Soil quality — Determination of effective cation exchange capacity and base saturation level using barium chloride solution*

ISO 11464, *Soil quality — Pretreatment of samples for physico-chemical analysis*

ISO 11465, *Soil quality — Determination of dry matter and water content on a mass basis — Gravimetric method*

ISO 22036, *Soil quality — Determination of trace elements in extracts of soil by inductively coupled plasma — Atomic emission spectrometry (ICP-AES)*

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