

STN	Kvalita pôdy. Stanovenie obsahu prchavých aromatických uhľovodíkov, naftalénu a prchavých halogénovaných uhľovodíkov plynovou chromatografiou. Metóda „purge-and-trap“ s termodesorpciou (ISO 15009:2016).	STN EN ISO 15009 46 5136
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Soil quality - Gas chromatographic determination of the content of volatile aromatic hydrocarbons, naphthalene and volatile halogenated hydrocarbons - Purge-and-trap method with thermal desorption (ISO 15009:2016)

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. 06/16

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 15009

March 2016

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Supersedes EN ISO 15009:2013

English Version

**Soil quality - Gas chromatographic determination of the
content of volatile aromatic hydrocarbons, naphthalene
and volatile halogenated hydrocarbons - Purge-and-trap
method with thermal desorption (ISO 15009:2016)**

Qualité du sol - Détermination par chromatographie en
phase gazeuse des teneurs en hydrocarbures
aromatiques volatils, en naphthalène et en
hydrocarbures halogénés volatils - Méthode par purge
et piégeage avec désorption thermique (ISO
15009:2016)

Bodenbeschaffenheit - Gaschromatographische
Bestimmung des Anteils an flüchtigen aromatischen
Kohlenwasserstoffen, Naphthalin und flüchtigen
Halogenkohlenwasserstoffen - Purge-und-Trap-
Anreicherung mit thermischer Desorption (ISO
15009:2016)

This European Standard was approved by CEN on 23 January 2016.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN ISO 15009:2016) has been prepared by Technical Committee ISO/TC 190 “Soil quality” in collaboration with Technical Committee CEN/TC 345 “Characterization of soils” 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of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

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Endorsement notice

The text of ISO 15009:2016 has been approved by CEN as EN ISO 15009:2016 without any modification.

**Soil quality — Gas chromatographic
determination of the content of
volatile aromatic hydrocarbons,
naphthalene and volatile halogenated
hydrocarbons — Purge-and-trap
method with thermal desorption**

*Qualité du sol — Détermination par chromatographie en phase
gazeuse des teneurs en hydrocarbures aromatiques volatils, en
naphthalène et en hydrocarbures halogénés volatils — Méthode par
purge et piégeage avec désorption thermique*





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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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

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

This third edition cancels and replaces the second edition (ISO 15009:2012), which has been technically revised.

Soil quality — Gas chromatographic determination of the content of volatile aromatic hydrocarbons, naphthalene and volatile halogenated hydrocarbons — Purge-and-trap method with thermal desorption

1 Scope

This International Standard specifies a method for quantitative gas-chromatographic determination of volatile aromatic hydrocarbons, naphthalene and volatile halogenated hydrocarbons in soil.

This International Standard is applicable to all types of soil.

NOTE In the case of unsaturated peaty soils, absorption of the extraction solution may occur.

The lower limit of quantification is dependent on the equipment used and the quality of the methanol grade used for the extraction of the soil sample.

Under the conditions specified in this International Standard the following limits of quantification apply (expressed on basis of dry matter):

Typical limit of quantification when using GC-FID:

— Volatile aromatic hydrocarbons: 0,1 mg/kg

Typical limit of quantification when using GC-ECD:

— Volatile halogenated hydrocarbons: 0,01 mg/kg

Lower limits of quantification for some compounds can be achieved by using mass spectrometry (MS) with selected ion detection.

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.

ISO 4799, *Laboratory glassware — Condensers*

ISO 10381-1, *Soil quality — Sampling — Part 1: Guidance on the design of sampling programmes*

ISO 10381-2, *Soil quality — Sampling — Part 2: Guidance on sampling techniques*

ISO 10381-5, *Soil quality — Sampling — Part 5: Guidance on the procedure for the investigation of urban and industrial sites with regard to soil contamination*

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

ISO 15680, *Water quality — Gas-chromatographic determination of a number of monocyclic aromatic hydrocarbons, naphthalene and several chlorinated compounds using purge-and-trap and thermal desorption*

ISO 18512, *Soil quality — Guidance on long and short term storage of soil samples*

ISO 22892, *Soil quality — Guidelines for the identification of target compounds by gas chromatography and mass spectrometry*

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