
Kakovost tal - Določevanje hlapnih aromatskih ogljikovodikov, naftalena in hlapnih halogeniranih ogljikovodikov s plinsko kromatografijo - Metoda "purge-and-trap" s toplotno desorpcijo (ISO 15009:2012)

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 15009:2012)

Bodenbeschaffenheit - Gaschromatographische Bestimmung des Anteils an flüchtigen aromatischen Kohlenwasserstoffen, Naphthalin und flüchtigen Halogenkohlenwasserstoffen - Purge-und-Trap-Anreicherung mit thermischer Desorption (ISO 15009:2012)

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Qualité du sol - Détermination par chromatographie en phase gazeuse des teneurs en hydrocarbures aromatiques volatils, en naphtalène et en hydrocarbures halogénés volatils - Méthode par purge et piégeage avec désorption thermique (ISO 15009:2012)

Ta slovenski standard je istoveten z: EN ISO 15009:2013

ICS:

13.080.10	Kemijske značilnosti tal	Chemical characteristics of soils
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EUROPEAN STANDARD

EN ISO 15009

NORME EUROPÉENNE

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April 2013

ICS 13.080.10

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 15009:2012)

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 15009:2012)

Bodenbeschaffenheit - Gaschromatographische
Bestimmung des Anteils an flüchtigen aromatischen
Kohlenwasserstoffen, Naphthalin und flüchtigen
Halogenkohlenwasserstoffen - Purge-und-Trap-
Anreicherung mit thermischer Desorption (ISO 15009:2012)

This European Standard was approved by CEN on 21 March 2013.

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Foreword

The text of ISO 15009:2012 has been prepared by Technical Committee ISO/TC 190 "Soil quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15009:2013 by 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 October 2013, and conflicting national standards shall be withdrawn at the latest by October 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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INTERNATIONAL STANDARD

ISO
15009

Second edition
2012-07-01

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

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*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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ISO 15009:2012(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15009 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 3, *Chemical methods and soil characteristics*.

This second edition cancels and replaces the first edition (ISO 15009:2002), which has been technically revised.

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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

1 Scope

This International Standard specifies a method for quantitative gas chromatographic determination of volatile 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 determination 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 determinations apply (expressed on a basis of dry matter):

- a) Typical limit of determination when using gas chromatography/flame ionization detection (GC/FID):
- volatile aromatic hydrocarbons: 0,1 mg/kg.
- b) Typical limit of determination when using gas chromatography/electron capture detector (GC/ECD):
- volatile halogenated hydrocarbons: 0,01 mg/kg.

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

2 Normative references

The following referenced documents are indispensable for the application 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 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 11465:1993/Cor 1:1994, *Soil quality — Determination of dry matter and water content on a mass basis — Gravimetric method — Technical Corrigendum 1*

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*