

STN	Kaly a tuhé environmentálne matrice Stanovenie obsahu suchého zvyšku alebo obsahu vody a výpočet hmotnostného podielu sušiny (ISO 11465: 2025)	STN EN ISO 11465 83 8441
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Sludge and solid environmental matrices - Determination of dry residue or water content and calculation of the dry matter fraction on a mass basis (ISO 11465:2025)

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. 12/25

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EN ISO 11465

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Supersedes EN 12880:2000, EN 15934:2012

English Version

Sludge and solid environmental matrices - Determination of dry residue or water content and calculation of the dry matter fraction on a mass basis (ISO 11465:2025)

Boues et matrices environnementales solides -
Détermination de la teneur en résidu sec ou en eau et
calcul de la fraction massique de matière sèche (ISO
11465:2025)

Schlamm und feste Umweltmatrizes - Bestimmung des
Trockenrückstands oder des Wassergehalts und
Berechnung des Trockenmassenanteils auf Grundlage
der Masse (ISO 11465:2025)

This European Standard was approved by CEN on 29 August 2025.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 17 December 2025.

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

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EN ISO 11465:2025 (E)

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European foreword

This document (EN ISO 11465:2025) has been prepared by Technical Committee ISO/TC 190 "Soil quality " in collaboration with Technical Committee CEN/TC 444 "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of an identical text or by endorsement, at the latest by March 2026, and conflicting national standards shall be withdrawn at the latest by March 2026.

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.

This document supersedes EN 12880:2000, EN 15934:2012.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 11465:2025 has been approved by CEN as EN ISO 11465:2025 without any modification.



International Standard

ISO 11465

Sludge and solid environmental matrices — Determination of dry residue or water content and calculation of the dry matter fraction on a mass basis

*Boues et matrices environnementales solides — Détermination de
la teneur en résidu sec ou en eau et calcul de la fraction massique
de matière sèche*

**Second edition
2025-08**

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ISO 11465:2025(en)**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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 3, *Chemical and physical characterization*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 444, *Environmental characterization of solid matrices*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 11465:1993), which has been technically revised. It also incorporates the Technical Corrigendum ISO 11465:1993/Cor 1:1994.

The main changes are as follows:

- content was merged with the content of EN 12880 where appropriate;
- content was merged with the content of EN 15934 where appropriate.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO 11465:2025(en)**Introduction**

In case of analysis of solids and sludge, water is usually not considered as part of the sample and results are generally related to dry matter, which can be calculated by determination of the dry residue (dry matter fraction). For this purpose, and for the determination of the water content, two methods are specified in this document. The choice of the method depends on the type of sample and its content of volatile substances excluding water.

As a result of the validation study, the determination of water content by azeotropic distillation has been replaced by Karl Fischer titration. Nevertheless, the distillation can be useful in certain cases.

This document is applicable and validated for several types of matrices as indicated in [Table 1](#) (see also [Annex A](#) for the results of the validation).

Table 1 — Matrices for which this document is applicable and validated

Matrix		Materials used for validation
Sludge	(only method A)	Municipal sludge
Biowaste	(only method A)	Fresh compost
Soil	(only method A)	Sludge amended soil
Waste	(methods A and B)	Contaminated soil Dredged sludge Nickel sludge Filter cake Distillation residue Drilling emulsion

Sludge and solid environmental matrices — Determination of dry residue or water content and calculation of the dry matter fraction on a mass basis

WARNING — Persons using this document should be familiar with usual 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 essential that tests conducted according to this document be carried out by suitably trained staff.

1 Scope

This document specifies methods for the calculation of the dry matter fraction of sludge, sludge products, treated biowaste, soil and waste for which the results of performed analysis are calculated to the dry matter basis. Depending on the nature and origin of the sample, the calculation is based on a determination of the dry residue (method A) or a determination of the water content (methods A and B). It applies to samples containing more than 1 % (mass fraction) of dry residue or more than 1 % (mass fraction) of water.

Method A applies to sludge, sludge products, treated biowaste, soil and solid waste. Method B applies to liquid waste and to samples which are suspected or known to contain volatiles except for water.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN