



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
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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.

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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As a result of the validation study, the determination of water content by azeotropic distillation has been replaced by Karl Fischer titration.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