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Soil, treated biowaste and sludge - Determination of adsorbed organically bound halogens (AOX)

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

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English Version

Soil, treated biowaste and sludge - Determination of adsorbed organically bound halogens (AOX)

Boues, biodéchets traités, sols et sédiments -Détermination des composés organiques halogénés adsorbables (AOX) Boden, behandelter Bioabfall und Schlamm -Bestimmung von adsorbierten organisch gebundenen Halogenen (AOX)

This European Standard was approved by CEN on 22 November 2021.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 16166:2021) has been prepared by 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of an identical text or by endorsement, at the latest by June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

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 16166:2012.

In comparison with the previous edition, the following technical modifications have been made:

- Calculation harmonized with EN ISO 9562;
- Initial check and daily check procedure harmonized with EN ISO 9562 and extended to include full measuring process.

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

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

Introduction

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).

NOTE This method can also be applied to other environmental solid matrices, provided the user has verified the applicability.

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

Matrix	Materials used for validation
Sludge	Municipal sludge
Compost	Fresh compost
	Compost
Soil	Sludge amended soil
	Agricultural soil

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 absolutely essential that tests conducted according to this document be carried out by suitably trained staff.

1 Scope

This document specifies an operationally defined method for the direct determination of organically bound halogens (chlorine, bromine and iodine) adsorbed and occluded to the sample matrix. AOX being a methodologically defined parameter, it is essential that the procedure is applied without any modification.

This document is intended for analysis of sludge, treated biowaste or soil in concentrations ranging from 5 mg/kg dry matter. The upper limit and exact concentration range covered depend on the instrumentation used for determination.

NOTE This method can also be applied to other environmental solid matrices, provided the user has verified the applicability.

2 Normative references

There are no normative references in this document.

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