# Characterization of sludges Determination of the loss on ignition of dry mass

Characterization of sludges - Determination of the loss on ignition of dry mass



#### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
12879:2001 sisaldab Euroopa standardi
EN 12879:2000 ingliskeelset teksti.

Käesolev dokument on jõustatud 15.01.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12879:2001 consists of the English text of the European standard EN 12879:2000.

This document is endorsed on 15.01.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard specifies a method for the determination of the loss on ignition of dry mass of sludges and sludge products at 550 °C after the dry residues have been determined in accordance with the method of EN 12880.

#### Scope:

This European Standard specifies a method for the determination of the loss on ignition of dry mass of sludges and sludge products at 550 °C after the dry residues have been determined in accordance with the method of EN 12880.

ICS 13.030.20

Võtmesõnad:

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English version**

# Characterization of sludges

Determination of the loss on ignition of dry mass

Caractérisation des boues – Détermination de la perte au feu de la matière sèche

Charakterisierung von Schlämmen – Bestimmung des Glühverlustes der Trockenmasse

This European Standard was approved by CEN on 2000-08-05.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

# CEN

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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#### **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 308 "Characterization of sludges", the secretariat of which is held by AFNOR.

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 February 2001, and conflicting national standards shall be withdrawn at the latest by February 2001.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. 

The annex A is informative.

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#### 1 Scope

This European Standard specifies a method for the determination of the loss on ignition of dry mass of sludges and sludge products at 550 °C after the dry residues have been determined in accordance with the method of EN 12880.

NOTE It should be noted that inorganic substances or decomposition products (e.g. H<sub>2</sub>O, CO<sub>2</sub>, SO<sub>2</sub>, O<sub>2</sub>) are released or absorbed and some inorganic substances are volatile under the reaction conditions.

#### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 12880, Characterization of sludges - Determination of dry residue and water content.

#### 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply:

#### 3.1

#### loss on ignition

the portion of mass escaping as gas as a result of the ignition of the dry mass of a sludge under specified conditions. The loss on ignition is related to the dry mass and expressed in percent

#### 3.2

#### residue on ignition

the portion of mass remaining after the ignition of the dry mass of a sludge under specified conditions. The residue on ignition is related to the dry mass and expressed in percent

#### 3.3

#### dry mass (dry matter)

the mass of solids obtained after the specified drying process. It is expressed as grams or kilograms [EN 12880]

#### 3.4

#### constant mass

constant mass is reached when, during the ignition process, the difference between two successive weighings of the sample, first heated, then cooled to room temperature and with an interval of 1 hour between them, is within 0.5% (m/m) of the last determined mass or 2 mg whichever is the greater

#### 4 Principle

Samples of dried sludge are heated in a furnace at  $(550 \pm 25)$  °C. The difference in mass before and after the ignition process is used to calculate the loss on ignition.