# Characterization of waste - Preparation of test portions from the laboratory sample

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#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 15002:2006 sisaldab Euroopa standardi EN 15002:2006 ingliskeelset teksti.

Käesolev dokument on jõustatud 30.03.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15002:2006 consists of the English text of the European standard EN 15002:2006.

This document is endorsed on 30.03.2006 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 is applicable for the preparation of representative test portions from the laboratory sample that has been taken according to the sampling plan (EN 14899), prior to physical and/or chemical analysis (e.g. preparation of eluates, extractions, digestion and/or analytical determinations) of solid and liquid samples and sludge.

#### Scope:

This European Standard is applicable for the preparation of representative test portions from the laboratory sample that has been taken according to the sampling plan (EN 14899), prior to physical and/or chemical analysis (e.g. preparation of eluates, extractions, digestion and/or analytical determinations) of solid and liquid samples and sludge.

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Võtmesõnad:

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English Version**

## Characterization of waste - Preparation of test portions from the laboratory sample

Caractérisation des déchets - Préparation de prises d'essai à partir de l'échantillon pour laboratoire Charakterisierung von Abfällen - Herstellung von Prüfmengen aus der Laboratoriumsprobe

This European Standard was approved by CEN on 30 December 2005.

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.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

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#### **Foreword**

This European Standard (EN 15002:2006) has been prepared by Technical Committee CEN/TC 292 "Characterisation of waste", 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 August 2006, and conflicting national standards shall be withdrawn at the latest by August 2006.

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

#### Introduction

In laboratory praxis, very often different analytical procedures have to be applied to the laboratory sample that has been taken according to the sampling plan. For this purpose subsampling has to be applied in a way, that the different test portions are representative for the original laboratory sample with respect to the compounds of interest and the specific analytical procedures. The representativity of the laboratory sample and of the test portions is of major importance to guarantee the quality and accuracy of analytical results. The representativity of the laboratory sample is specified by the sampling plan. This European Standard specifies the correct sequence of operations to ensure the representativity of the test portions.

#### Safety remarks

Anyone dealing with waste and sludge analysis has to be aware of the typical risks of that kind of material irrespective of the parameter to be determined. Waste and sludge samples may contain hazardous (e.g. toxic, reactive, flammable and infectious) substances, which can be liable to biological and/or chemical reaction. Consequently it is recommended that these samples should be handled with special care. The gases that may be produced by microbiological or chemical activity are potentially flammable and will pressurise sealed and with. bottles. Bursting bottles are likely to result in hazardous shrapnel, dust and/or aerosol. National regulations should be followed with respect to all hazards associated with this method.

#### 1 Scope

This European Standard is applicable for the preparation of representative test portions from the laboratory sample that has been taken according to the sampling plan (EN 14899), prior to physical and/or chemical analysis (e.g. preparation of eluates, extractions, digestion and/or analytical determinations) of solid and liquid samples and sludge. It is also applicable for the preparation of test portions from digests and eluates for the subsequent analyses.

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On the control of the c This European Standard is intended to find the correct sequence of operations and treatments to be applied to the laboratory sample in order to obtain suitable test portions in compliance with the specific requirements defined in the corresponding analytical procedures.

#### 2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 11465:1993, Soil quality – Determination of dry matter and water content on a mass basis – Gravimetric method

ISO 14507:2003, Soil quality — Pretreatment of samples for determination of organic contaminants

#### 3 Terms and definitions

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

#### 3.1

#### sample

portion of material selected from a larger quantity of material

#### 3.2

#### laboratory sample

sample sent to or received by the laboratory

NOTE 1 When the laboratory sample is further prepared (reduced) by subdividing, mixing, grinding, or by combinations of these operations, the result is the test sample. When no preparation of the laboratory sample is required, the laboratory sample is the test sample. A test portion is removed from the test sample for the performance of the test or for analysis.

NOTE 2 The laboratory sample is the final sample from the point of view of sample collection but it is the initial sample from the point of view of the laboratory.

NOTE 3 Several laboratory samples may be prepared and sent to different laboratories or to the same laboratory for different purposes. When sent to the same laboratory, the set is generally considered as a single laboratory sample and is documented as a single sample.

#### 3.3

#### test sample; analytical sample

sample, prepared from the laboratory sample, from which test portions are removed for testing or analysis

#### 3.4

#### test portion; analytical portion

quantity of material of proper size, for measurement of the concentration or other properties of interest, removed from the test sample

NOTE The test portion may be taken from the laboratory sample directly if no preparation of sample is required (e. g. with liquids or samples of proper homogeneity, size and fineness), but usually it is taken from the prepared test sample.

#### 3.5

#### sub-sample

sample obtained by procedures in which the items of interest are randomly distributed in parts of equal or unequal size

#### NOTE A sub-sample may be:

- a) portion of the sample obtained by selection or division;
- b) the final sample of multistage sample-preparation.