VÄETISED JA LUBIAINED. PROOVIDE VÕTMINE JA PROOVIDE ETTEVALMISTAMINE. OSA 1: PROOVIDE VÕTMINE

Fertilizers and liming materials - Sampling and sample preparation - Part 1: Sampling



# EESTI STANDARDI EESSÕNA

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1482-1

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ICS 65.080

Supersedes EN 1482:1996

#### **English Version**

# Fertilizers and liming materials - Sampling and sample preparation - Part 1: Sampling

Engrais et amendements minéraux basiques -Echantillonnage et préparation des échantillons - Partie 1: Echantillonnage Düngemittel und Calcium-/Magnesium-Bodenverbesserungsmittel - Probenahme und Probenvorbereitung - Teil 1: Probenahme

This European Standard was approved by CEN on 15 December 2006.

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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 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

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# **Foreword**

This document (EN 1482-1:2007) has been prepared by Technical Committee CEN/TC 260 "Fertilizers and liming materials", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by July 2007, and conflicting national standards shall be withdrawn at the latest by July 2007.

Together with Part 2, this document supersedes EN 1482:1996.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilizers.

EN 1482, Fertilizers and liming materials — Sampling and sample preparation" consists of two parts:

- Part 1: Sampling
- Part 2: Sample preparation

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

# Introduction

This European Standard (EN 1482-1) covers the following aspects of sampling, derived from the International Standards and documents indicated but presented in a simplified and condensed form. The titles of the International Standards are given in the Bibliography.

- Sampling plans and quantitative data: ISO 8634, ISO/TR 5307, ISO/TR 7553 and EEC 77/535 (superseded by Regulation (EC) No 2003/2003).
- Sampling methods: ISO 3963, and EEC 77/535 (superseded by Regulation (EC) No 2003/2003).
- Reduction: ISO 7410, ISO 7742, ISO 8358 and EEC 77/535 (superseded by Regulation (EC) No 2003/2003).
- Sampling reports: ISO 5306 and EEC 77/535 (superseded by Regulation (EC) No 2003/2003).

EN 1482-2 covers the reduction and preparation of samples for analysis.

Figure 1 gives a schematic diagram of the sampling and sample preparation process for solids.

The fundamental principle of representative sampling is that every particle has an equal chance of being selected or rejected. This principle cannot easily be compiled with in the case of bulk heaps of solid fertilizers or large storage tanks of fluid fertilizers as the majority of the material cannot be reached by any sampling device. The fertilizer in these cases should be sampled during transfer, during the building up of the heap, during the filling of the storage tank, during dispatch or where it is being moved solely for sampling purposes.

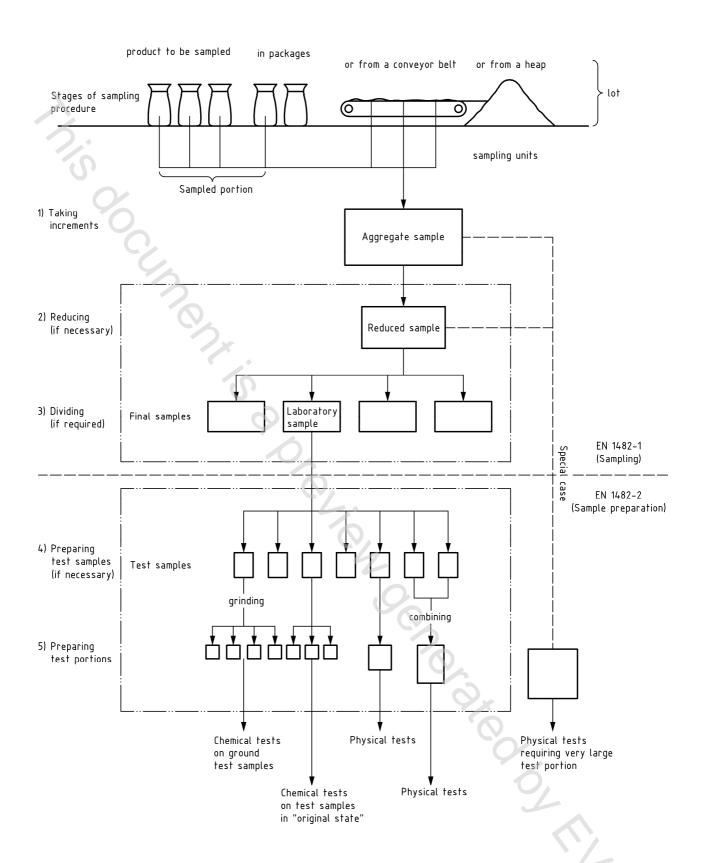


Figure 1 — Schematic diagram of sampling process for solids

# 1 Scope

This European Standard specifies sampling plans and methods of representative sampling of fertilizers and liming materials to obtain samples for physical and chemical analysis, from packages and containers up to and including 1 000 kg, from fluid products and from fertilizers in bulk provided the product is in motion.

It is applicable to the sampling of lots of fertilizer or liming material supplied or ready for supply to third parties, as such, or in smaller lots, each of which would be subject to local, national or regional legislation. Where legislation so requires, samples are taken in accordance with this European Standard.

NOTE The term fertilizer is used throughout the body of this European Standard and should be taken to include liming materials unless otherwise indicated.

This European Standard does not cover complete, statistical sampling plans.

#### 2 Normative references

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

EN 1235, Solid fertilizers — Test sieving (ISO 8397:1988 modified)

ISO 2602, Statistical interpretation of test results — Estimation of the mean — Confidence interval

ISO 3310-1, Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth

## 3 Terms and definitions

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

#### 3.1

#### aggregate sample

combination of all increments from the lot or sampled portion

NOTE The increments may be grouped together in equal numbers in order to form several aggregate samples which can be reduced and analysed separately.

#### 3.2

#### delivery

quantity of material transferred at one time

### 3.3

#### division

process of producing a number of representative smaller portions, approximately equal in mass to each other, from a larger mass

#### 3.4

# final sample

representative part of the reduced sample or, where no intermediate reduction is required, of the aggregate sample

NOTE Often, more than one sample is prepared, at the same time, from the reduced sample (or from the aggregate sample). One or more of these final samples is used as a laboratory sample or as laboratory samples, while others may be stored for reference purposes.