| STN | Hnojivá, prípravky na vápnenie a inhibítory Odber vzoriek a príprava vzoriek Časť 1: Všeobecné pravidlá na odber vzoriek |
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STN EN 1482-1

65 4805

Fertilizers, liming materials and inhibitors - Sampling and sample preparation - Part 1: General sampling provisions

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/25

Obsahuje: EN 1482-1:2024

Oznámením tejto normy sa ruší STN EN 1482-1 (65 4805) zo septembra 2007

140200

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1482-1

December 2024

ICS 65.080

Supersedes EN 1482-1:2007

English Version

Fertilizers, liming materials and inhibitors - Sampling and sample preparation - Part 1: General sampling provisions

Engrais, amendements minéraux basiques et inhibiteurs - Échantillonnage et préparation de l'échantillon - Partie 1 : Dispositions générales pour l'échantillonnage Düngemittel, Kalkdünger und Hemmstoffe -Probenahme und Probenvorbereitung - Teil 1: Allgemeine Festlegungen zur Probenahme

This European Standard was approved by CEN on 25 November 2024.

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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

Contents Page

| Europ | ean foreword | 5 |
|---------------------------|--|----|
| Introd | luction | 6 |
| 1 | Scope | 8 |
| 2 | Normative references | 8 |
| 3 | Terms and definitions | 9 |
| 4 | Sampling plans and quantitative data | 10 |
| 4.1 | General | 10 |
| 4.2 | Sampling plans | 10 |
| 4.2.1 | Determination of the number of sampling units which form the sampled portion. | 10 |
| 4.2.2 | Identification of the sampling units to be sampled | 11 |
| 4.2.3 | Collection of incremental samples | 12 |
| 4.3 | Quantitative data | 12 |
| 4.3.1 | Mass of incremental samples | 12 |
| 4.3.2 | Mass of single combined samples | 12 |
| 4.3.3 | Mass of multiple combined samples | |
| 4.3.4 | Mass of final sample | 13 |
| - | Incremental sampling methods | |
| 5 5.1 | GeneralGeneral | |
| 5.1 5.2 | Solid product in bulk being moved by conveyor belt – Stopping the belt method | |
| 5.2.1 | GeneralGeneral | |
| 5.2.1 5.2.2 | Principle | |
| 5.2.2 5.2.3 | Apparatus | |
| 5.2.3 5.2.4 | Procedure | |
| 5.2.4 5.3 | Solid product in bulk - Mechanical sampling whilst in motion | |
| 5.3.1 | GeneralGeneral | |
| 5.3.1 5.3.2 | Procedure | |
| 5.3.2 5.4 | Solid product in bulk - Manual sampling from falling stream | |
| 5.4.1 | Principle | |
| 5.4.2 | Apparatus | |
| 5.4.3 | Procedure | |
| 5. 4 .5 5.5 | Solid product in bulk - Manual sampling method by moving the bulk | |
| 5.5.1 | GeneralGeneral | |
| 5.5. 2 | Procedure | |
| 5.5.2 5.6 | Solid products in packages – Reduction method using a rotating mechanical samp | |
| 3.0 | dividerdivider | |
| 5.6.1 | General | |
| 5.6.2 | Principle | |
| 5.6.3 | Apparatus | |
| 5.6.4 | Procedure | |
| 5.6.5 | Precautions | |
| 5.0.5 5.7 | Solid products in packages – Reduction method using a riffle divider | |
| 5.7.1 | General | |
| 5.7.2 | Apparatus | |
| 5.7.3 | Procedure | |
| J 1 7 1 U | * * ^ ^ ^ ^ ************************** | |

| 5.8 | Sampling of solid products in packages - Manual method | |
|----------------|---|----|
| 5.9 | Sampling from intermediate bulk containers (IBCs) by controlled flow | 22 |
| 5.9.1 | General | |
| 5.9.2 | Principle | |
| 5.9.3 | Safety | |
| 5.9.4 | Apparatus | |
| 5.9.5 | Obtaining incremental samples | |
| 5.9.6 | Precautions | |
| 5.10 | Sampling from intermediate bulk containers (IBCs) - Manual method | |
| | PrincipleProcedure | |
| 5.10.2 5.11 | Sampling of liquid products | _ |
| _ | General | |
| | Apparatus | |
| | Procedure | |
| | | |
| 6 | Reduction of combined sample | |
| 6.1 6.2 | General | |
| 6.2.1 | General | |
| 6.2.2 | Procedure | |
| 6.3 | Liquid products | |
| 6.3.1 | Apparatus | |
| 6.3.2 | Procedure | |
| 7 | Division into final samples | |
| 8 | Practical arrangements for final samples | 31 |
| 8.1 | Containers | |
| 8.2 | Sealing of containers | 31 |
| 8.3 | Labelling of final samples | |
| 8.4 | Dispatch of the final sample | |
| 8.5 | Storage of final samples | 32 |
| 9 | Sampling report | 32 |
| 9.1 | General | |
| 9.2 | Essential information | 32 |
| 9.3 | Additional information | 33 |
| Annex | A (normative) Test for bias in mechanical samplers | 34 |
| A.1 | Principle | 34 |
| A.2 | Apparatus | 34 |
| A.3 | Test conditions | 34 |
| A.4 | Procedure | 34 |
| A.4.1 | Collection of incremental samples | |
| A.4.2 | Preparation of samples | 35 |
| A.4.3 | Analysis of samples | |
| A.5 | Expression of results | 35 |
| A.5.1 | General case where the incremental samples taken by the two methods do not correspond exactly to each other | 35 |

| A.5.Z | exactly to each otherexactly to each other | |
|------------|--|----|
| A.6 | Interpretation of the results | 36 |
| Annex | B (informative) Examples of rotating sample dividers | 37 |
| Annex | C (normative) Test for bias in a rotary divider | 40 |
| Annex | D (informative) Examples of apparatus for sampling liquid products | 41 |
| Annex | E (normative) Methods of mixing for liquid products | 49 |
| E.1 | General | 49 |
| E.2 | Small containers | 49 |
| E.2.1 | Hand shaking | 49 |
| E.2.2 | Rocking | 49 |
| E.3 | Drums and casks (up to about 1,8 m deep) | 49 |
| E.3.1 | Rocking in a see-saw fashion | 49 |
| E.3.2 | Rolling to and from | 49 |
| E.3.3 | Mechanically driven drum shaker or roller | 49 |
| E.3.4 | Mechanical mixing | 49 |
| E.3.5 | Hand mixing | 51 |
| E.3.6 | Compressed gas | 52 |
| E.4 | Shallow tanks | 52 |
| E.5 | Deep tanks | 53 |
| E.5.1 | General | 53 |
| E.5.2 | Pumped circulation | 53 |
| E.5.3 | Compressed gas | 53 |
| E.6 | Precautions for sampling multi-phase liquids, including slurries | 53 |
| E.7 | Precautions for sampling liquids with significant vapour pressure | 54 |
| E.7.1 | Introduction | 54 |
| E.7.2 | General precautions | 54 |
| E.7.3 | Gases liquefied by pressure at ambient temperatures | 54 |
| E.8 | Precautions against static electricity | 54 |
| E.8.1 | Generation of static electricity | 54 |
| E.8.2 | Discharge of static electricity | 55 |
| Biblio | graphy | 56 |

European foreword

This document (EN 1482-1:2024) 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 June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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 1482-1:2007.

EN 1482-1 includes the following significant technical changes with respect to EN 1482-1:2007:

- Title, Introduction, Scope, Normative References, Terms and definitions have been updated;
- Requirements on sampling for detonation testing, oil retention and other tests added to 4.3.2;
- The mass of the final sample in 4.3.4 has been specified;
- 5.11 has been modified to improve sampling procedures.

EN 1482, *Fertilizers, liming materials and inhibitors* — *Sampling and sample preparation* consists of four parts:

- Part 1: General sampling provisions;
- Part 2: General sample preparation provisions;
- Part 3: Sampling of static heaps;
- Part 4: Sampling for microbiological presence in fertilizers.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document 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 Regulation (EU) 2019/1009;
- Sampling methods: ISO 3963;
- Reduction: ISO 7410, ISO 7742, ISO 8358;
- Sampling reports: ISO 5306.

EN 1482-2 covers the general methods for the reduction and preparation of samples of fertilizers, liming materials and inhibitors for analysis. EN 1482-3 covers the sampling of specified products when stored in a static heap. EN 1482-4 covers the sampling of specified fertilizers to be tested for the presence of regulated microbes.

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. In some circumstances this principle cannot easily be complied with, particularly in the case of bulk heaps of solid products not specified in EN 1482-3, or large storage tanks of liquid products as the majority of the product cannot be reached by any sampling device. The fertilizers, liming materials or inhibitors in these cases are 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.

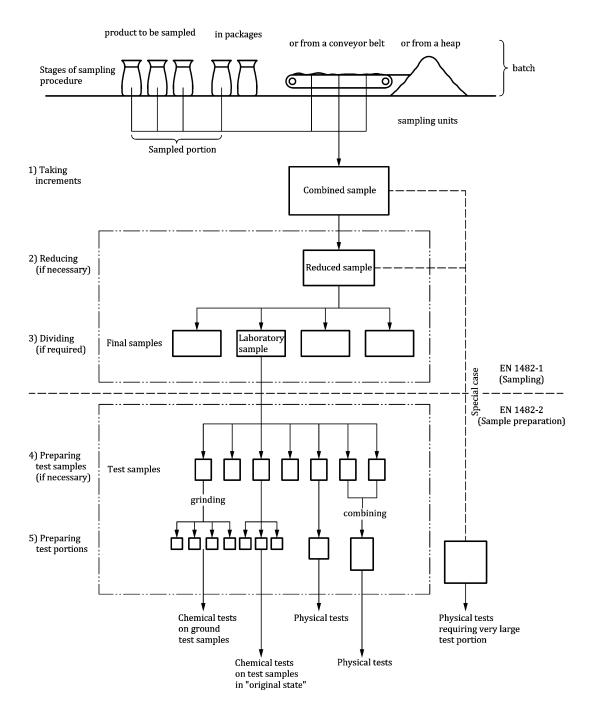


Figure 1 — Schematic diagram of sampling process for solids for chemical and physical testing

1 Scope

This document specifies sampling plans and methods of representative sampling of fertilizers, liming materials and inhibitors, in liquid and solid form, for physical and chemical analysis. This document covers sampling of products in bulk only while in motion and from packages and containers up to and including 1 000 kg of product in solid form and 1 000 l of product in liquid form.

NOTE 1 The sampling of bulk heaps of specified types of fertilizers and liming materials is covered in EN 1482-3. Sampling for detection of microbial presence is covered by EN 1482-4.

NOTE 2 The term product is used throughout the body of this document and is understood to include fertilizers, liming materials and inhibitors unless otherwise indicated.

It is applicable to the sampling of batches of fertilizers, liming materials and inhibitors supplied or ready for supply to third parties, as such, or in smaller batches, each of which would be subject to local, national or regional legislation.

This document does not cover complete, statistical sampling plans.

This document is applicable to the fertilizing products blends where a blend is a mix of at least two of the following components: fertilizers, liming materials, soil improvers, growing media, inhibitors and plant biostimulants and where the following category organic fertilizers, organo-mineral fertilizers, inorganic fertilizers, liming materials or inhibitors is the highest % in the fertilizing product blend by mass or volume, or in the case of liquid form by dry mass. If the category (organic fertilizers, organo-mineral fertilizers, inorganic fertilizers, liming materials or inhibitors) is not the highest % in the fertilizing product blend, the European Standard for the highest % of the fertilizing product blend applies. In case a fertilizing product blend is composed of components in equal quantity, the user decides which standard to apply. Special care is needed to ensure that the fertilizing product blend is and stays homogeneous and well mixed when sampled.

NOTE 3 It is the responsibility of manufacturers, importers and sellers, however, to ensure they supply a product that complies with its label declaration at the moment of delivery and fulfils the expectations of the end user at the moment of application.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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)

EN 12944-1, Fertilizers and liming materials — Vocabulary — Part 1: General terms

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

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