
**Fertilizers and liming materials —
Sampling and sample preparation —**

**Part 3:
Sampling of static heaps**

*Engrais et amendements minéraux basiques — Échantillonnage et
préparation de l'échantillon —*

Partie 3: Échantillonnage des tas statiques



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 134, *Fertilizers, soil conditioners and beneficial substances*.

This first edition is based on EN 1482-3.

A list of all parts in the ISO 14820 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The establishment of this document for methods of sampling and analysis is of utmost importance to guarantee a uniform application and control of fair trade. Standardized methods of sampling and analysis are essential elements in guaranteeing a high level of quality and safety of fertilizers for the benefit of purchasers. Competent authorities have limited resources for conformity assessment, and these resources are most efficiently deployed at the downstream end of the supply chain. Representative sampling is essential to achieve reliable analytical results.

The fundamental principle of representative sampling is that every particle has an equal chance of being sampled. This principle cannot easily be complied with in the case of bulk static heaps of solid fertilizers as a large proportion of the material cannot practically be reached by any sampling device. Wherever possible, this fertilizer should be sampled during transfer, during the building up of the heap, during dispatch or where it can practically be moved solely for sampling purposes. However, in some cases, sampling in the way described is not practicable. Sampling of static heaps should only be carried out when the product is not in motion.

Fertilizers and liming materials — Sampling and sample preparation —

Part 3: Sampling of static heaps

1 Scope

This document is applicable to the sampling of mineral fertilizers and liming materials supplied or ready for supply to third parties, as a lot or in smaller lots, where such supply or readiness for supply is subject to legal requirements.

This document specifies plans and methods of sampling of a lot of solid fertilizer or liming material, if sampling in motion is not possible, to obtain samples from bulk static heaps in order to ascertain compliance with legal requirements, in particular in relation to the accuracy of compulsory or permitted statutory declarations. The methods specified in this document are not applicable to obtain samples for physical size analysis or for chemical analysis which may be altered by particle granulometric segregation.

This document is applicable to single nutrient fertilizers, to uniform complex fertilizers and to milled or granulated fertilizers and liming materials.

The methods described in this document are not suitable for sampling other types of fertilizer, for example blended fertilizers.

NOTE The term 'fertilizer' is used throughout the body of this document and includes liming materials unless otherwise indicated.

2 Normative references

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

ISO 14820-1:2016, *Fertilizers and liming materials — Sampling and sample preparation — Part 1: Sampling*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14820-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

fertilizer

solid inorganic material designated for use as a fertilizer including liming materials