



Copyright © 2021 International Fertilizer Association – All Rights Reserved

International Fertilizer Association (IFA) – 49 avenue d'Iéna - 75116 Paris – France Tel. +33 1 53 93 05 00 - Fax +33 1 53 93 05 45/47 - ifa@fertilizer.org - www.fertilizer.org

This recommendation was prepared by the IFA Working Group* on the Harmonization of Fertilizer Sampling and Methods of Analysis. This document is available to the general public and is a reference document for the international trade of fertilizer products. It should not be considered to be an international standard; nor does this document take precedence over existing national and regional regulations or standards.

This recommendation and its background documents are available to the general public on the IFA web site (www.fertilizer.org), or through written request to the IFA Secretariat.

Edward B. Linde*, SGS Natural Resources, Tampa, U.S.A, ed.linde@sgs.com

Copyright © 2021 International Fertilizer Industry Association - All Rights Reserved

Sampling Report Guidelines for Dry Solid Fertilizers

Background

Accurate and representative sampling is a crucial and challenging operation requiring knowledge of the product being sampled as well as the correct sampling process. Trading parties within the global fertilizer industry often apply different methods and procedures for sampling operations, which may subsequently lead to varying degrees of representativeness of the samples being taken.

Sampling methods should be applied with strict adherence by trained personnel with sampling experience. Moreover, a standardized approach should be recommended irrespective of the sampling location, shipment size or commodity.

General

Fertilizer materials may be sampled for numerous reasons including but not limited to regulatory/legal requirements, commercial/trade, manufacturing, and processing. For regulatory and/or commercial purpose a sampling report should be completed that provides sufficient information detailing the when, where and how such samples were obtained.

The IFA Working Group on the Harmonization of Fertilizer Sampling and Methods of Analysis has developed a set of reporting guidelines for those utilizing the 'Recommended Best Practices' for the sampling of fertilizer materials.

The following guideline is intended to provide the basis for developing a comprehensive report of sampling:

- 1. A detailed record keeping system should be established
- 2. The date, time and location of the sampling event
- 3. The name of the sampler and the department or organization to which he or she belongs
- 4. The name and description associated with the fertilizer material to be sampled and whether it is in bulk or bags (specify size of bag)
- 5. The overall quantity of the fertilizer material presented (e.g.: declared quantity mt)
- 6. The sampling standard / procedure referenced

7. Description of sampling:

- Mechanical/automatic or Manual
- Static or Dynamic
- Sampling of bagged/packaged material
- Sampling from transfer point/falling stream
- Sampling from moving conveyor belt
- o Sampling from transportation mode e.g.: barge, truck, rail wagon
- Sampling from stockpile
- 8. The sampling plan adopted, detailing the exact number of sub-lots and/or increments to be taken
- 9. Increment size/mass (kg)
- 10. Declared particle size (in mm) of material to be sampled e.g.: 2 mm by 4 mm
- 11. Description and detail of sampling apparatus (equipment) utilized e.g.: Stream Sampler with 20mm opening, 500 ml sample cup, sample trier/spear with five 12mm openings
- 12. All relevant observations made during the sampling procedure, which in the opinion of the sampler may be of importance
- 13. Photographs of the site, sampling equipment and of the sampling in progress are recommended to be included in the report
- 14. A written record that includes the accurate and factual reporting of the sampling process

References

- 1. ISO 5306-1983 Fertilizers Presentation of Sampling Report
- 2. ISO 8634-1991 Solid Fertilizers Sampling plan for evaluation of large delivery
- 3. EN 1482-1:2007 Fertilizer & Liming Materials Sampling & Sample Preparation

Note: The IFA Working Group on the Harmonization of Fertilizer Sampling and Methods of Analysis have published several papers outlining 'Recommended Best Practices' for the sampling of fertilizer materials which may be accessed at the following website:

https://www.fertilizer.org/Public/About_fertilizers/Library/Public/About_Fertilizers/Library.aspx?hkey =ee9428e5-6f0a-4a3a-92b0-ac89f391bdc3