

International Standard



8213

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**Chemical products for industrial use — Sampling techniques — Solid chemical products in the form of particles varying from powders to coarse lumps**

*Produits chimiques à usage industriel — Techniques de l'échantillonnage — Produits chimiques solides de petite granulométrie et agglomérats grossiers*

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## Foreword

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International Standard ISO 8213 was prepared by Technical Committee ISO/TC 47, *Chemistry*.

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# Chemical products for industrial use — Sampling techniques — Solid chemical products in the form of particles varying from powders to coarse lumps

## 1 Scope and field of application

This International Standard describes the general techniques of taking and preparing samples with a view to the assessment of a solid chemical product lot, for use in conjunction with a previously established sampling plan (as described, for example, in ISO 6063 or ISO 6064).

This International Standard is applicable to solid chemical products, in particulate form, ranging from powders to coarse lumps with a maximum size of 100 mm, and consigned in containers (of, for example, 25, 50 or 100 kg) or in bulk.

Massive pieces and solids in a plastic are not dealt with in this International Standard.

NOTE — This International Standard should be used in conjunction with the vocabulary, given in ISO 6206.

## 2 References

ISO 565, *Test sieves — Woven metal wire cloth and perforated plate — Nominal sizes of apertures.*

ISO 607, *Surface active agents and detergents — Methods of sample division.*

ISO 2591, *Test sieving.*

ISO 3165, *Sampling of chemical products for industrial use — Safety in sampling.*

ISO 6206, *Chemical products for industrial use — Sampling — Vocabulary.*

## 3 Principle

Taking of a certain number of increments from the lot to be sampled.

Mixing of the increments to form either a bulk sample or several primary samples, depending on the purpose of the sampling.

Preparation by means of replicate reductions, from the bulk sample or from each primary sample, of a reduced sample, then of several laboratory samples, each stage of the division being preceded in each case by blending and, if necessary, by grinding and sieving of the product.

## 4 Apparatus

GENERAL REMARK — All the apparatus described below must be made of materials inert to the product to be sampled. Moreover, apparatus must cause no contamination, segregation or loss of product.

### 4.1 Apparatus for sampling and constitution of samples

It is essential that sampling apparatus exhibits only a small systematic error.

Four main types of apparatus can be used, according to circumstances :

#### 4.1.1 Scoop sampler

A scoop of appropriate shape and dimensions, depending on the nature of the product to be sampled, may be used as follows :

- when the material is homogeneous, to take an increment at an easily accessible point in the sampling unit;
- when the material is not homogeneous, to take a sample by the so-called "alternate division" method;