

Animal feeding stuffs — Sampling

ICS 65.120

National foreword

This British Standard reproduces verbatim ISO 6497:2002 and implements it as the UK national standard.

The UK participation in its preparation was entrusted to Technical Committee AW/10, Animal feeding stuffs, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

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Animal feeding stuffs — Sampling

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6497 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 10, *Animal feeding stuffs*.

Annex A of this International Standard is for information only.

Animal feeding stuffs — Sampling

1 Scope

This International Standard specifies methods of sampling animal feeding stuffs, including fish feed, for quality control for commercial, technical and legal purposes.

It is not applicable to pet foods. Nor are the methods intended for sampling for the purpose of microbiological examination. Conditions of, and requirements for, sampling are specified separately for feeding stuffs of different physical natures.

For certain categories of animal feeding stuff, specific methods of sampling are specified in other International Standards. A list of these can be found in the bibliography. When sampling the products specified, it is these methods which shall be used.

Methods of sampling for the determination of substances likely to be non-uniformly distributed are described in Annex A.

2 Terms and definitions

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

2.1

consignment

a specified quantity of feeding stuff on offer, dispatched or received at one time

NOTE It may consist of one or more lots (see 2.2).

2.2

lot

an identified quantity of a consignment having characteristics presumed to be uniform

NOTE The uniformity of the characteristics may be due, for example, to the fact that the products are supplied by a single producer always using the same production process, where production is stable and the individual characteristics follow a normal distribution or a close approximation to a normal distribution (note that special circumstances can give rise to subdivisions in the distribution). Consequently, the term “lot” means an “inspection lot” in sampling, i.e. a quantity of material or a collection of items (a population) from which a sample is to be drawn and inspected. It may therefore differ from a collection of items referred to as a lot in the shipment context, for example.

2.3

increment

a quantity of material taken at one time from a single point in a lot

2.4

bulk sample

a quantity of material obtained by combining and mixing all the increments taken from the same lot

NOTE A collection of distinct and identifiable increments intended for separate investigation may be denoted the “gross sample”.

2.5

reduced sample

a representative part of the bulk sample, obtained by a process of successive division or reduction in such a manner that the mass or volume approximates to that of the laboratory samples

2.6

laboratory sample

a sample representative of the quality and condition of the lot, obtained by division of the reduced sample and intended for analysis or other examination

NOTE For each sample taken, three or four laboratory samples are normally produced. One of these should be submitted for testing and at least one stored for reference purposes. If more than four laboratory samples are required, the quantity of the reduced sample will have to be increased so that the minimum quantity requirement for all laboratory samples can be met.

3 General principles

3.1 Representative sampling

The purpose of representative sampling is to obtain a small fraction from a lot in such a way that a determination of any particular characteristic of this fraction will represent the mean value of the characteristic of the lot.

The lot shall be sampled by repeatedly taking increments at various single positions in the lot. These increments shall be combined by mixing to form a bulk sample from which representative laboratory samples shall be prepared by dividing.

3.2 Selective sampling

If portions of the material to be sampled show a noticeable difference in quality from the rest of the material, such portions shall be separated from the material and treated as a separate lot. In such cases, mention shall be made of this fact in the sampling report.

If it is not possible to divide the material into separate lots, the material shall be sampled as one lot, and the sampling report shall indicate this fact. The proportion of the product suspected to be different shall be given, if possible.

3.3 Statistical considerations

Acceptance sampling is the usual method of sampling for animal feeding stuffs. For sampling by attributes, there is a theoretical sampling plan based on a binomial distribution, but, for practical purposes, this plan has been simplified to a square-root relationship between the lot size and the number of increments.

NOTE 1 With bulk products, sample variances can be expected to be acceptably uniform if, for lots up to 2,5 tonnes, at least seven increments are taken and, for lots between 2,5 tonnes and 80 tonnes, the number of increments taken is at least equal to $\sqrt{20m}$, where m is the mass, in tonnes, of the lot. If the lot exceeds 80 tonnes, the square-root relationship is still applicable, but the risk of making incorrect decisions on the basis of the samples increases. However, this can be the subject of agreement between the interested parties.

NOTE 2 The application of the square-root relationship is somewhat different for the sampling of packaged animal feeding stuffs, for liquids and semi-liquids, for blocks and licks and for roughages, because the sample size may vary.

4 Sampling personnel

Sampling shall be carried out by persons suitably trained and experienced in the sampling of animal feeding stuffs and who are particularly aware of the hazards and dangers the product and the sampling process may involve.