

Methods for

Sampling oilseed residues

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Committees responsible for this British Standard

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- AFRC Institute of Food Research
- British Food Manufacturing Industries Research Association
- Department of Trade and Industry (Laboratory of the Government Chemist)
- FOSFA International
- Grain and Feed Trade Association
- International Association of Seed Crushers
- Ministry of Agriculture, Fisheries and Food
- National Farmers' Union
- Overseas Development Administration (Tropical Development and Research Institute)
- Royal Society of Chemistry
- Rubber Growers' Association
- Seed Crushers' and Oil Processors' Association

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National foreword

This British Standard has been prepared under the direction of the Food and Agriculture Standards Committee. It is identical with ISO 5500:1986 “*Oilseed residues — Sampling*” published by the International Organization for Standardization (ISO) and in the preparation of which the United Kingdom played a full part. It supersedes BS 6606:1985, which is withdrawn and from which it differs in that it includes a procedure for sampling oilseed residues containing undesirable substances which are likely to be non-uniformly distributed, such as mycotoxins, castor-oil seed husks and poisonous seeds.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

The comma has been used as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words “International Standard” appear, referring to this standard, they should be read as “British Standard”.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

0 Introduction

Correct sampling is a difficult process and one that requires most careful attention. Emphasis cannot therefore be too strongly laid on the necessity of obtaining a representative sample of oilseed residues for analysis.

Practically all oilseed residues are sold on the basis of the result of analysis of the samples, and disputes are invariably settled by reference to the sample, so that careless or inaccurate sampling could lead to misunderstanding, delay and unwarranted financial adjustments.

The procedures given in this International Standard are recognised as good practice and it is strongly recommended that they be followed whenever practicable.

1 Scope and field of application

This International Standard specifies methods of sampling oilseed residues.

It is applicable to all oilseed residues, regardless of their presentation, i.e. whether in the form of meals, agglomerates or slab cakes.

Annex C gives a method, reflecting the present state of knowledge, of sampling oilseed residues containing undesirable substances which are likely to be non-uniformly distributed, such as mycotoxins, castor-oil seed husks and poisonous seeds.

2 Definitions

For the purpose of this International Standard, the following definitions apply.

2.1

consignment

the quantity of oilseed residues dispatched or received at one time and covered by a particular contract or shipping document. It may be composed of one or more lots or parts of a lot

2.2

lot

a stated quantity of the consignment, of mass not exceeding 500 t, presumed to be of uniform characteristics, and which will allow the quality to be assessed

2.3

increment

a small quantity of oilseed residues taken at one time from a single position in the lot. A series of increments is taken from different parts of the lot, so that, when they are bulked, they are representative of the lot

2.4

bulk sample

the quantity of oilseed residues formed by combining and blending the increments taken from any one particular lot

2.5

reduced sample

the quantity of oilseed residues obtained by successive divisions of the bulk sample and which will allow identical laboratory samples representative of the lot to be prepared

2.6

laboratory sample

a sample representing the quality of the lot, obtained from the reduced sample and intended for analysis or other examination

3 General

3.1 Samples shall be fully representative of the lots from which they are taken. For this purpose, each consignment shall be divided, actually or notionally, into lots of mass not exceeding 500 t and a number of increments shall be taken from each lot and carefully mixed to give a bulk sample from which laboratory samples are obtained by successive division.

3.2 Special care is necessary to ensure that all sampling apparatus is clean, dry, free from foreign odours and made from material which will not contaminate the oilseed residue.

Sampling shall be carried out in such a manner as to protect the samples, the sampling instruments and the container in which the samples are placed, from adventitious contamination such as rain, dust, etc.

Material adhering to the outside of the sampling instrument shall be removed before the contents are discharged.

3.3 All sampling operations shall be carried out over a sufficiently short period of time, so as to avoid any alteration in the composition of the samples. If one of the sampling stages will require too long a period of time, the samples or intermediate samples shall be preserved in airtight containers.

If samples are required for the determination of volatile hydrocarbons, it is particularly important that loss by evaporation be avoided. Plastics containers are not suitable.

4 Apparatus

NOTE Examples of sampling apparatus are illustrated in Annex A. Many different types and variations of apparatus are available, and the dimensions and designs given in the figures are included solely as a guide.