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**Animal feeding stuffs —  
Determination of crude ash**

*Aliments des animaux — Dosage des cendres brutes*



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# Contents

	Page
Foreword.....	iv
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references.....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 Principle.....</b>	<b>1</b>
<b>5 Apparatus.....</b>	<b>1</b>
<b>6 Sampling.....</b>	<b>2</b>
<b>7 Procedure.....</b>	<b>2</b>
7.1 Preparation of test sample.....	2
7.2 Test portion.....	2
7.3 Determination.....	2
<b>8 Expression of results.....</b>	<b>3</b>
<b>9 Precision.....</b>	<b>3</b>
9.1 Interlaboratory tests.....	3
9.2 Repeatability.....	4
9.3 Reproducibility.....	4
<b>10 Test report.....</b>	<b>5</b>
<b>Annex A (informative) Results of interlaboratory tests.....</b>	<b>6</b>
<b>Bibliography.....</b>	<b>7</b>

## 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](http://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](http://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](http://www.iso.org/iso/foreword.html).

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

This third edition cancels and replaces the second edition (ISO 5984:2002), which has been technically revised. It also incorporates the Technical Corrigendum ISO 5984:2002/Cor 1:2005.

The main changes are as follows:

- an alternative way of incineration (directly in the cold muffle furnace) has been added;
- the possibility to use a thermocouple sensor for the muffle furnace has been added;
- the obligation to perform two determinations has been removed;
- the repeatability and reproducibility ranges have been modified.

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](http://www.iso.org/members.html).

# Animal feeding stuffs — Determination of crude ash

## 1 Scope

This document specifies a method for the determination of crude ash of animal feeding stuffs.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6498, *Animal feeding stuffs — Guidelines for sample preparation*

## 3 Terms and definitions

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

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

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

### 3.1

#### **crude ash**

residue obtained after incineration at  $(550 \pm 25)^\circ\text{C}$  under the conditions specified in this document

Note 1 to entry: It is expressed as a mass fraction of the sample in per cent.

## 4 Principle

A test portion is carbonized and then incinerated at  $(550 \pm 25)^\circ\text{C}$ . After cooling, the ash obtained is weighed.

## 5 Apparatus

Usual laboratory apparatus and, in particular, the following.

**5.1 Analytical balance**, capable of weighing to the nearest 0,001 g.

**5.2 Muffle furnace**, electrically heated, thermostatically controlled, provided with a pyrometer or a thermocouple sensor.

The furnace is set at  $550^\circ\text{C}$ . The furnace temperature shall be of  $(550 \pm 25)^\circ\text{C}$  where the incineration dishes will be placed.

It is recommended to use a furnace equipped with a programmable time-temperature controller.

**5.3 Drying oven**, capable of being controlled at  $(103 \pm 2)^\circ\text{C}$ .

**5.4 Hot-plate or gas burner.**