

ICS 65.120

English Version

Animal feeding stuffs - Determination of the content of fatty acids - Part 2: Gas chromatographic method (ISO/TS 17764-2:2002)

Aliments des animaux - Détermination de la teneur en acides gras - Partie 2: Méthode par chromatographie en phase gazeuse (ISO/TS 17764-2:2002)

Futtermittel - Bestimmung des Gehaltes an Fettsäuren - Teil 2: Gaschromatographisches Verfahren (ISO/TS 17764-2:2002)

This Technical Specification (CEN/TS) was approved by CEN on 13 February 2006 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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Foreword

This document (CEN ISO/TS 17764-2:2006) has been prepared by Technical Committee CEN/TC 327 "Animal feeding stuffs - Methods of sampling and analysis", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 34 "Agricultural food products".

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this CEN Technical Specification: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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 2.

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.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

- an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;
- an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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.

ISO/TS 17764-2 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 10, *Animal feeding stuffs*.

ISO/TS 17764 consists of the following parts, under the general title *Animal feeding stuffs — Determination of the content of fatty acids*:

- *Part 1: Preparation of methyl esters*
- *Part 2: Gas chromatographic method*

Animal feeding stuffs — Determination of the content of fatty acids —

Part 2: Gas chromatographic method

1 Scope

ISO/TS 17764 specifies methods for the quantitative determination of individual fatty acids and of the sum of the fatty acids (elutable fatty acids).

This part of ISO/TS 17764 specifies the application of gas chromatography with capillary columns and flame ionization detection for the determination of the quantitative content of fatty acids in a fat by making use of the methyl esters of the fatty acids obtained in accordance with the method specified in ISO/TS 17764-1.

This part of ISO/TS 17764 is applicable to the investigation of animal and vegetable fats, oils and fatty acid mixtures for incorporation in animal feeding stuffs and fat extracts of animal feeding stuffs and raw materials for compound animal feeds, including fats and fatty acid mixtures containing butyric acid.

This method is not applicable to polymerized fatty acids.

2 Normative references

The following referenced documents are indispensable for the application 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 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO/TS 17764-1, *Animal feeding stuffs — Determination of the content of fatty acids — Part 1: Preparation of methyl esters*

3 Terms and definitions

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

3.1

fatty acid content

mass fraction of the fatty acids in the test portion of oil, fat, fat extract, free fatty acids or soaps

NOTE The fatty acid content is expressed in grams per kilogram.

3.2

content of elutable material

mass fraction of the sum of all the fatty acids elutable using a gas chromatographic column as described in this part of ISO/TS 17764