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Processed cheese products — Determination of nitrogen content and crude protein calculation — Kjeldahl method

Fromages fondus — Détermination de la teneur en azote et calcul des protéines brutes — Méthode Kjeldahl

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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 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 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order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn.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again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.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 17837⏐IDF/RM 25 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*, and the International Dairy Federation (IDF). It is being published jointly by ISO and IDF.

This corrected version of ISO/TS 17837:2008⏐IDF/RM 25 incorporates the following corrections:

a) the introductory element of the title on the cover and page 1, “Milk and milk products”, has been modified to “Processed cheese products”, the corresponding change in the French title on the cover being the deletion of “*Lait et produits laitiers*” and insertion of “*Fromages fondus*”;

b) in the ISO foreword, the penultimate paragraph (a previous edit of the final paragraph) has been deleted;

c) Clause 1 and its Note have been modified to relate solely to processed cheese products;

d) the title “8.1 Cheese” and the whole of 8.2 have been deleted, with corresponding updates to the contents list;

e) in 9.1.1, line 2, and in 9.2.1, line 2, “8.1 or 8.2” has been deleted, and “Clause 8” inserted;

f) in 9.1.2.1, paragraph 2, line 2, and 9.2.2.1, paragraph 5, line 2, “for milk analysis” has been deleted.

Foreword

IDF (the International Dairy Federation) is a non-profit organization representing the dairy sector worldwide. IDF membership comprises National Committees in every member country as well as regional dairy associations having signed a formal agreement on cooperation with IDF. All members of IDF have the right to be represented at the IDF Standing Committees carrying out the technical work. IDF collaborates with ISO in the development of standard methods of analysis and sampling for milk and milk products.

Draft International Standards adopted by the Action Teams and Standing Committees are circulated to the National Committees for voting. Publication as an International Standard requires approval by at least 50 % of the IDF National Committees casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a Standing Committee may decide to publish another type of normative document which is called by IDF: *Reviewed method*. Such a method represents an agreement between the members of a Standing Committee and is accepted for publication if it is approved by at least 50 % of the committee members casting a vote. A *Reviewed method* is equal to an ISO/PAS or ISO/TS and will, therefore, also be published jointly under ISO conditions.

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

ISO/TS 17837|IDF/RM 25 was prepared by the International Dairy Federation (IDF) and Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*. It is being published jointly by IDF and ISO.

All work was carried out by the Joint ISO-IDF Action Team on *Nitrogen compounds* of the Standing committee on *Main components in milk* under the aegis of its project leader, Mr. J. Romero (US).

This edition of ISO/TS 17837|IDF/RM 25 cancels and replaces IDF 25:1964, which has undergone minor editorial and technical revisions.

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Processed cheese products — Determination of nitrogen content and crude protein calculation — Kjeldahl method

WARNING — Performance of the method specified in this Technical Specification may involve the use of hazardous materials, operations, and equipment. This Technical Specification does not purport to address all the safety risks associated with such performance. It is the responsibility of the user to establish appropriate safety and health practices and determine the applicability of local regulatory limitations prior to performance of the method.

1 Scope

This Technical Specification specifies a method for the determination of the nitrogen content and crude protein content by calculation in processed cheese products by using the Kjeldahl principle, both traditional and block digestion methods.

NOTE Inaccurate crude protein results are obtained if non-dairy sources of nitrogen are present in the specified processed cheese products.

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 385, *Laboratory glassware — Burettes*

ISO 1042, *Laboratory glassware — One-mark volumetric flasks*

ISO 4788, *Laboratory glassware — Graduated measuring cylinders*

3 Terms and definitions

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

3.1
nitrogen content
mass fraction of nitrogen determined by the procedure specified in this Technical Specification

NOTE The nitrogen mass fraction is expressed as a percentage.

3.2
crude protein content
mass fraction of crude protein calculated as specified by this Technical Specification

NOTE The crude protein mass fraction is expressed as a percentage.