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Milk — Determination of fat content

Lait — Détermination de la teneur en matière grasse



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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

International Dairy Federation
Diamant Building • Boulevard Auguste Reyers 80 • B-1030 Brussels
Tel. + 32 2 733 98 88
Fax + 32 2 733 04 13
E-mail info@fil-idf.org
Web www.fil-idf.org

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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.

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 2446|IDF 226 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 second edition of ISO 2446|IDF 226 cancels and replaces the first edition (ISO 2446:1976), of which it constitutes a minor revision.

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.

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 2446|IDF 226 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 former Joint ISO-IDF/AOAC Group of Experts (E40-E301) which is now part of the Joint ISO-IDF Action Team on *Fat*, of the Standing Committee on *Main components in milk*.

Milk — Determination of fat content

1 Scope

This International Standard specifies the Gerber method for the determination of the fat content of milk and includes guidance on the determination of the appropriate capacity of the milk pipette and on the determination of the corrections to apply to the results if the milk is not of average fat content (see 6.1). The procedure for checking the capacity of the milk pipette is specified in Annex A.

The method is applicable to liquid milk, whole or partially skimmed, raw or pasteurized. With modifications, details of which are given, it is also applicable to:

- a) milk containing certain preservatives (see Clause 11);
- b) milk that has undergone the process of homogenization, in particular sterilized milk and ultra heat-treated (UHT) milk (see Clause 12);
- c) skimmed milk (see Clause 13).

NOTE The result obtained by the procedure specified in Clause 12 (modified for milk that has undergone homogenization) may be slightly high.

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 488|IDF 105, *Milk — Determination of fat content — Gerber butyrometers*

ISO 1211|IDF 1, *Milk — Determination of fat content — Gravimetric method (Reference method)*

3 Terms and definitions

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

3.1

Gerber method

empirical procedure which gives a value for fat content either as a mass fraction or as a mass concentration — depending on the capacity of the milk pipette used — that is the same as, or has a known relationship to, the value obtained by the reference method specified in ISO 1211|IDF 1

NOTE The mass fraction is expressed in grams of fat per 100 g of milk and the mass concentration in grams of fat per 100 ml of milk.