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Dried milk — Determination of titratable acidity (Reference method)

Lait sec — Détermination de l'acidité titrable (Méthode de référence)

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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 6091 | IDF 86 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 6091 | IDF 86 cancels and replaces the first edition (ISO 6091:1980), 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 on 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.

The main task of Standing Committees is to prepare International Standards. Draft International Standards adopted by the Standing Committees are circulated to the National Committees for endorsement prior to publication as an International Standard. Publication as an International Standard requires approval by at least 50% of IDF National Committees casting a vote.

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ISO 6091 | IDF 86 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 Action Team on *Carbohydrate and lactate determination*, now part of the Standing Committee on *Analytical methods for composition*.

This edition of ISO 6091 | IDF 86 cancels and replaces IDF 86:1981, of which it constitutes a minor revision.

Dried milk — Determination of titratable acidity (Reference method)

1 Scope

This International Standard specifies a reference method for the determination of the titratable acidity of all types of dried milk.

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 1736|IDF 9, *Dried milk and dried milk products — Determination of fat content — Gravimetric method (Reference method)*

ISO 5537|IDF 26, *Dried milk — Determination of moisture content (Reference method)*

3 Terms and definitions

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

3.1
titratable acidity of dried milk
volume of 0,1 mol/l sodium hydroxide solution required to titrate a quantity of the reconstituted milk corresponding to 10 g of solids-not-fat to pH 8,40

NOTE Titratable acidity is expressed in millilitres.

4 Principle

Milk is reconstituted by addition of water to a test portion of dried milk corresponding accurately to 5 g of solids-not-fat. The reconstituted milk is titrated with 0,1 mol/l sodium hydroxide solution to pH 8,40. The number of millilitres used in the titration is multiplied by 2, in order to obtain the number of millilitres in terms of 10 g of solids-not-fat.

The amount of sodium hydroxide solution required is a function of the amount of natural buffering substances present in the product, and of developed or added acid or alkaline substances.

5 Reagents and materials

Unless otherwise stated, use only reagents of recognized analytical grade and distilled or demineralized water or water of equivalent purity, freed from carbon dioxide by boiling for 10 min before use.