

INTERNATIONAL STANDARD

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Milk and milk products — Enumeration of colony-forming units of yeasts and/or moulds — Colony-count technique at 25 °C

*Lait et produits laitiers — Dénombrement des unités formant colonie de
levures et/ou moisissures — Comptage des colonies à 25 °C*



Reference number
ISO 6611:1992(E)

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.

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.

International Standard ISO 6611 was prepared by Technical Committee ISO/TC 34, *Agricultural food products*, Sub-Committee SC 5, *Milk and milk products*, in collaboration with the International Dairy Federation (IDF) and the Association of Official Analytical Chemists (AOAC), and will also be published by these organizations.

Annex A of this International Standard is for information only.

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Milk and milk products — Enumeration of colony-forming units of yeasts and/or moulds — Colony-count technique at 25 °C

1 Scope

This International Standard specifies a method for the detection and enumeration of colony-forming units (CFU) of viable yeasts and/or moulds in milk and milk products by means of the colony-count technique at 25 °C.

The method is applicable to

- milk, liquid milk products,
- dried milk, dried sweet whey, dried buttermilk, lactose,
- cheese,
- acid casein, lactic casein, rennet casein,
- caseinate, acid whey powder,
- butter,
- frozen milk products (including edible ices),
- custard, desserts, fermented milk and cream.

NOTE 1 This method is not suitable for a large number of thermolabile yeasts (in fresh cheese). In such cases the agar-surface-plating method is preferred.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7218:1985, *Microbiology — General guidance for microbiological examinations*.

ISO 8261:1989, *Milk and milk products — Preparation of test samples and dilutions for microbiological examination*.

3 Definition

For the purposes of this International Standard, the following definition applies.

3.1 yeasts and moulds: Micro-organisms which at 25 °C form colonies in a selective medium under the conditions specified in this International Standard.

4 Principle

4.1 Preparation of poured plates using a specified selective culture medium and a specified quantity of the test sample if the initial product is liquid, or of an initial suspension in the case of other products.

Preparation of other plates, under the same conditions, using decimal dilutions of the test sample or of the initial suspension.

4.2 Aerobic incubation of the plates at 25 °C for 5 days.

4.3 Calculation of the number of colony-forming units (CFU) of yeasts and/or moulds per gram or per millilitre of product from the number of colonies obtained on plates chosen at dilution levels so as to give a significant result.

5 Diluents and culture medium

5.1 General

For general guidance, see ISO 7218.