

**Piim. Somaatiliste rakkude arvu määramine. Osa
1: Mikroskoopiline meetod**

Milk - Enumeration of somatic cells - Part 1:
Microscopic method (Reference method)

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NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 13366-1:2008 sisaldab Euroopa standardi EN ISO 13366-1:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 24.04.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.02.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 13366-1:2008 consists of the English text of the European standard EN ISO 13366-1:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 24.04.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 15.02.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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Võtmesõnad: bioloogilised katsed, katsed, loendamine, mikroskoopiline analüüs, piim, põllumajandustooted, rakud, toiduainetooted, võrdlusmeetodid

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English Version

Milk - Enumeration of somatic cells - Part 1: Microscopic method
(Reference method) (ISO 13366-1:2008)

Lait - Dénombrement des cellules somatiques - Partie 1:
Méthode au microscope (Méthode de référence) (ISO
13366-1:2008)

Milch - Zählung somatischer Zellen - Teil 1:
Mikroskopisches Verfahren (Referenzverfahren) (ISO
13366-1:2008)

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN ISO 13366-1:2008) has been prepared by Technical Committee ISO/TC 34 "Agricultural food products" in collaboration with Technical Committee CEN/TC 302 "Milk and milk products - Methods of sampling and analysis", the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2008, and conflicting national standards shall be withdrawn at the latest by August 2008.

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

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Endorsement notice

The text of ISO 13366-1:2008 has been approved by CEN as a EN ISO 13366-1:2008 without any modification.

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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.

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ISO 13366-1|IDF 148-1 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 *Automated methods* of the Standing Committee on *Quality assurance, statistics of analytical data and sampling* under the aegis of its project leaders, Mrs. S. Orlandini (IT) and Mr. H.J.C.M. van den Bijgaart (NL).

This edition of ISO 13366-1|IDF 148-1 cancels and replaces IDF 148A:1995.

ISO 13366 consists of the following parts, under the general title *Milk — Enumeration of somatic cells*:

- *Part 1: Microscopic method (Reference method)*
- *Part 2: Guidance on the operation of fluoro-opto-electronic counters*

Milk — Enumeration of somatic cells —

Part 1:

Méthode au microscope (Méthode de référence)

1 Scope

This part of ISO 13366|IDF 148 specifies a microscopic method (reference method) for the counting of somatic cells in both raw and chemically preserved milk.

This part of ISO 13366|IDF 148 is applicable for the counting of somatic cells in cows' milk, provided that the eventually mentioned prerequisites are met.

This method is suitable for preparing standard test samples and determining reference method values that are required for calibrating mechanized and automated cell-counting methods.

WARNING — The use of this standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2 Terms and definitions

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

2.1

somatic cells

those cells with nuclei, that is all leucocytes and epithelial cells, determined according to the procedure described in this part of ISO 13366|IDF 148

3 Principle

A test portion of milk to be examined is spread over a slide to form a smear. The smear is dried. During this process, the cells are stained. Subsequently, the stained cells are counted using a microscope. The number of cells counted in a defined area are multiplied by a working factor, to give the number of cells per millilitre.

4 Reagents

Use only reagents of recognized analytical grade, unless otherwise specified, and distilled or deionized water or water of equivalent purity.

4.1 Dye solutions

WARNING — Tetrachloroethane is poisonous. Ethidium bromide is mutagenic. Proper actions for deactivation should be taken in case of spilling. Preparation and application of the dye solution shall be carried out in a fume cupboard, using protective equipment.