

**Piim. Somaatiliste rakkude arvu
määramine. Fluoro-optoelektroniline
meetod**

Milk - Enumeration of somatic cells - Part 3: Fluoro-
opto-electronic method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 13366-3:2000 sisaldab Euroopa standardi EN ISO 13366-3:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 13366-3:2000 consists of the English text of the European standard EN ISO 13366-3:1997.</p> <p>This document is endorsed on 18.08.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>See ISO 13366 osa määrab kindlaks meetodi somaatiliste rakkude arvu määramiseks nii toorpiimas kui ka keemiliselt konservitud piimas, kasutades fluoro-optoelektronilist loendurit.</p>	<p>Scope:</p>
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ICS 67.100.10

Võtmesõnad: bioloogilised katsed, elektrooniline meetod, katsed, loendamine, piim, põllumajandustooted, rakud, toiduainetooted

ICS 07.100.30; 67.100.10

Descriptors: Milk, microbiological enumeration, somatic cells.

English version

Milk

Enumeration of somatic cells
Part 3: Fluoro-opto-electronic method
(ISO 13366-3 : 1997)

Lait – Dénombrement des cellules
somatiques – Partie 3: Méthode
fluoro-opto-électronique
(ISO 13366-3 : 1997)

Milch – Zählung somatischer Zellen –
Teil 3: Fluoreszenzoptoelektronisches
Verfahren (ISO 13366-3 : 1997)

This European Standard was approved by CEN on 1997-05-10.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 13366-3 : 1997 Milk – Enumeration of somatic cells – Part 3: Fluoro-opto-electronic method, which was prepared by ISO/TC 34 'Agricultural food products' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 302 'Milk and milk products', the Secretariat of which is held by NNI, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by December 1997 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 13366-3 : 1997 was approved by CEN as a European Standard without any modification.

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 to determine the applicability of regulatory limitations prior to use.

1 Scope

This part of ISO 13366 specifies a method for counting somatic cells in both raw and chemically preserved milk, using a fluoro-opto-electronic counting instrument¹⁾.

NOTE — Counting of cells in unpreserved samples within the first 24 h after milking could give unreliable results with older instruments (e.g. Fossomatic 90 and 215).

2 Definition

For the purposes of this part of ISO 13366, the following definition applies.

2.1 somatic cells: Those cells that have a minimum intensity of fluorescence due to the staining of DNA in their nuclei.

3 Principle

Mixing of the milk to be examined with a buffer and stain solution. Transference of the mixture in the form of a thin film to a rotating disc, serving as an object plane for a microscope. Each stained cell observed by the microscope produces an electrical pulse that is amplified and recorded. Direct reading of the number of somatic cells in thousands per millilitre.

4 Reagents

WARNING — Ethidium bromide is toxic. The preparation and application of the basic and working solutions shall be carried out in a fume cupboard. Use gloves for protection.

1) The Fossomatic counting instrument (250, 300 or 360) supplied by Foss Electric, Hillerød, Denmark is an example of suitable equipment available commercially. This information is given for the convenience of users of this part of ISO 13366 and does not constitute an endorsement by ISO of the equipment named.