Piim. Somaatiliste rakkude arvu määramine. Osa 2: Elektrooniline osakeste lugemise meetod

Milk - Enumeration of somatic cells - Part 2: Electronic particle counter method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 13366-2:2000 sisaldab Euroopa standardi EN ISO 13366-2:1997 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 13366-2:2000 consists of the English text of the European standard EN ISO 13366-2:1997.
Standard on kinnitatud Eesti Standardikeskuse 18.08.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 18.08.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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

EUROPEAN STANDARD
NORME EUROPÉENNE
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EN ISO 13366-2

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ICS 07.100.30

Descriptors: Milk, microbiological enumeration, somatic cells.

English version

Milk

Enumeration of somatic cells
Part 2: Electronic particle counter method
(ISO 13366-2 : 1997)

Lait – Dénombrement des cellules somatiques – Partie 2: Méthode au compteur électronique de particules (ISO 13366-2 : 1997)

Milch – Zählung somatischer Zellen – Teil 2: Elektronisches Partikelzählverfahren (ISO 13366-2 : 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.

CEN members are the national standards bodies of 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.

CEN

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

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

Ref. No. EN ISO 13366-2 : 1997 E

Foreword

International Standard

ISO 13366-2 : 1997 Milk – Enumeration of somatic cells – Part 2: Electronic particle counter 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 13366-2 : 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 the number of somatic cells in both raw and chemically preserved milk, using an electronic particle counter[1)].

NOTE — The user of this method should be aware that due to the counting principle (particle counting) the results are not always comparable with those obtained by the methods of part 1 and part 3 of ISO 13366.

2 Definition

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

2.1 somatic cells: Those cells that are counted by an electronic particle counter, after fixing a lower threshold level and elimination of fat particles overlapping the size range of somatic cells.

3 Principle

Addition of formaldehyde solution (formalin) to the sample to be examined to fix the somatic cells. Dilution by an emulsifying electrolyte mixture and subsequent heating sufficient to break down the fat globules overlapping the size range of the cells. Direct reading of the number of somatic cells in thousands per millilitre.

NOTE — In an electronic particle counter, the milk passes through an aperture located between electrodes. When a particle passes through the aperture, it displaces its own volume of highly conductive liquid by one of lower conductivity. The increased resistance raises the voltage, producing a voltage pulse proportional to the volume of the particle. The number of pulses indicates the number of passing particles. Only pulses above a fixed threshold level are counted.

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1) The Coulter Counter, supplied by Coulter Electronics Ltd., Northwell Drive, Luton LV 3 3 RH, Bedfordshire, England, 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.