



**SLOVENSKI STANDARD**  
**SIST EN ISO 13366-1:2008**  
**01-maj-2008**

**BUXca Yý U.**  
**SIST EN ISO 13366-1:1998**

---

A`Y\_c`!`I [ cHJ `Ub`Y`ýHj ] Ugca Uhg ] `W`]W!`%`XY.`A] fcg\_cdg\_Ua YhcXU  
fFYZfYb bUa YhcXU`fGC`%`'`\*\*`!`%`&\$\$, Ł

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

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

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

<https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008>

**Ta slovenski standard je istoveten z: EN ISO 13366-1:2008**

---

**ICS:**

67.100.10

**SIST EN ISO 13366-1:2008**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 13366-1:2008

<https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008>

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)

This European Standard was approved by CEN on 3 February 2008.

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 CEN Management Centre or to any CEN member.

This European Standard exists 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

[SIST EN ISO 13366-1:2008](https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008)

<https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008>



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

SIST EN ISO 13366-1:2008

<https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008>

## 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.

This document supersedes EN ISO 13366-1:1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## iTeh STANDARD PREVIEW

(standards.iteh.ai) **Endorsement notice**

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

[SIST EN ISO 13366-1:2008  
https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008](https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008)

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 13366-1:2008

<https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008>

INTERNATIONAL  
STANDARD

ISO  
13366-1

IDF  
148-1

Second edition  
2008-02-15

---

---

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

*Lait — Dénombrement des cellules somatiques —*

*Partie 1: Méthode au microscope (Méthode de référence)*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 13366-1:2008](https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008)

<https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008>



Reference numbers  
ISO 13366-1:2008(E)  
IDF 148-1:2008(E)

© ISO and IDF 2008

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. Neither the ISO Central Secretariat nor the IDF accepts any liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies and IDF national committees. In the unlikely event that a problem relating to it is found, please inform the ISO Central Secretariat at the address given below.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 13366-1:2008](https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008)

<https://standards.iteh.ai/catalog/standards/sist/44e4ccde-b23b-42e5-a08b-bcf693bfef14/sist-en-iso-13366-1-2008>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO and IDF 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO or IDF at the respective address below.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

International Dairy Federation  
Diamant Building • Boulevard Auguste Reyers 80 • B-1030 Brussels  
Tel. + 32 2 733 98 88  
Fax + 32 2 733 04 13  
E-mail [info@fil-idf.org](mailto:info@fil-idf.org)  
Web [www.fil-idf.org](http://www.fil-idf.org)

Published in Switzerland



## Contents

Page

Foreword.....	iv
Foreword.....	v
1 Scope .....	1
2 Terms and definitions .....	1
3 Principle.....	1
4 Reagents.....	1
4.1 Dye solutions .....	1
4.2 Phosphate Buffer Solution (PBS).....	3
5 Apparatus .....	4
6 Sampling.....	4
7 Preparation of test sample.....	4
7.1 Storage.....	4
7.2 Preparation .....	5
8 Procedure .....	5
8.1 Preparation of the smear and staining .....	5
8.2 Determination.....	6
9 Calculation and expression of results.....	10
9.1 Rectangular shape counting in successive fields.....	10
9.2 Rectangular shape counting in bands.....	11
9.3 Circular shape counting in successive fields.....	11
9.4 Expression of results .....	12
10 Precision.....	12
10.1 Repeatability.....	12
10.2 Reproducibility.....	12
11 Test report .....	13
Annex A (informative) Collaborative trial.....	14
Annex B (informative) Staining for goats' milk .....	15
Annex C (informative) Poisson distribution .....	16
Bibliography .....	17

## 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 13366-1|IDF 148-1 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.

iTeh STANDARD PREVIEW

This second edition of ISO 13366-1|IDF 148-1 cancels and replaces the first edition (ISO 13366-1:1997), of which it constitutes a technical revision.

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*

## 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.

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

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*