

## SLOVENSKI STANDARD SIST EN ISO 6785:2007

01-oktober-2007

### A`Y\_c`]b`a`Y b]`dfc]njcX]`!`I [cHUj`^Ub^Y`df]gcHbcgh]`jfghGU`acbY`UfHGC \*+,).&\$\$%L

Milk and milk products - Detection of Salmonella spp. (ISO 6785:2001)

Milch und Milcherzeugnisse - Nachweis von Salmonella spp. (ISO 6785:2001)

### Lait et produits laitiers <sup>i</sup> Recherche de Salmonella spp. (ISO 6785:2001) (standards.iteh.ai)

Ta slovenski standard je istoveten z: EN ISO 6785:2007

https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-

8a74a2b72f85/sist-en-iso-6785-2007

### ICS:

07.100.30Mikrobiologija živilFood microbiology67.100.01T |^\ [ Áş Á |^ } ã | ã ç[ å ã , æMilk and milk products in<br/>general

SIST EN ISO 6785:2007

en,fr,de

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 6785:2007</u> https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### EN ISO 6785

June 2007

ICS 07.100.30

**English Version** 

# Milk and milk products - Detection of Salmonella spp. (ISO 6785:2001)

Lait et produits laitiers - Recherche de Salmonella spp. (ISO 6785:2001) Milch und Milcherzeugnisse - Nachweis von Salmonella spp. (ISO 6785:2001)

This European Standard was approved by CEN on 19 May 2007.

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 6785:2007 https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007



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

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

© 2007 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members. Ref. No. EN ISO 6785:2007: E

### Foreword

The text of ISO 6785:2001 has been prepared by Technical Committee ISO/TC 34 "Agricultural food products" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 6785:2007 by 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 December 2007, and conflicting national standards shall be withdrawn at the latest by December 2007.

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 United Kingdom.

## iTeh STARDARD PREVIEW

The text of ISO 6785:2001 has been approved by CEN as EN ISO 6785:2007 without any modifications.

SIST EN ISO 6785:2007 https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007

# INTERNATIONAL STANDARD

Second edition 2001-05-15

# Milk and milk products — Detection of *Salmonella* spp.

Lait et produits laitiers - Recherche de Salmonella spp.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 6785:2007 https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007



Reference numbers ISO 6785:2001(E) IDF 93:2001(E)

© ISO and IDF 2001

#### 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)

<u>SIST EN ISO 6785:2007</u> https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007

© ISO and IDF 2001

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.ch Web www.iso.ch Printed in Switzerland International Dairy Federation 41 Square Vergote B-1030 Brussels

### Contents

### Page

1	Scope	1
2	Normative reference	1
3	Terms and definitions	1
4	Principle	1
4.1	General	1
4.2	Pre-enrichment in non-selective liquid medium	1
4.3	Enrichment in selective liquid media	1
4.4	Streaking out and recognition	2
4.5	Confirmation	2
5	Culture media, reagents and sera	2
6	Apparatus and glassware (standards.iteh.ai)	12
7	Sampling	13
~		
8	Preparation of test sample <u>SIST EN ISO 6785:2007</u> https://standards.iteh.ai/catalog/standards/sist/50/439924-a9dd-49fb-9ae5-	13
	Preparation of test sample	13 13
	https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5- Procedure	
9	https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5- Procedure	13
9 9.1	https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-         Procedure       8a74a2b72f85/sist-en-iso-6785-2007         Safety precautions       Safety precautions         Procedure       Test portion and pre-enrichment	13 13
9 9.1 9.2	hitps://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5- Procedure	13 13 13
9 9.1 9.2 9.3	hitps://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5- Procedure	13 13 13 14
9 9.1 9.2 9.3 9.4	https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5- Procedure	13 13 13 14 14
9 9.1 9.2 9.3 9.4 9.5	https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5- Procedure	13 13 13 14 14 15
9 9.1 9.2 9.3 9.4 9.5 10	https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-         Procedure       &a74a2b72fk5/sist-en-iso-6785-2007         Safety precautions	<ol> <li>13</li> <li>13</li> <li>13</li> <li>14</li> <li>14</li> <li>15</li> <li>18</li> </ol>

### Annexes

Α	Diagram of procedure	20
в	Specification for brilliant green	21
С	Standard method for streaking agar plates	22
Bib	liography	23

### 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 3.

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 member bodies casting a vote.

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

International Standard ISO 6785 IDF 93 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*, and the International Dairy Federation (IDF), in collaboration with AOAC International. It is being published jointly by ISO and IDF and separately by AOAC International.

This second edition cancels and replaces the first edition (ISO 6785:1985), which has been technically revised.

Annexes A and B form a normative part of this International Standard. Annex C is for information only.

SIST EN ISO 6785:2007 https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007

### Foreword

**IDF (the International Dairy Federation)** is a worldwide federation of the dairy sector with a National Committee in every member country. Every National Committee has the right to be represented on the IDF Standing Committees carrying out the technical work. IDF collaborates with ISO and AOAC International 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 National Committees casting a vote.

International Standard ISO 6785 IDF 93 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*, and the International Dairy Federation (IDF), in collaboration with AOAC International. It is being published jointly by ISO and IDF and separately by AOAC International.

All work was carried out by the Joint ISO/IDF/AOAC Action Team on *Harmonization*, of the Standing Committee on *Microbial methods of analysis*, under the aegis of its project leader, Mr. H. Becker (DE).

This fourth edition cancels and replaces the third edition (IDF 93:1995).

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

SIST EN ISO 6785:2007 https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72t85/sist-en-iso-6785-2007

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 6785:2007</u> https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007

### Milk and milk products — Detection of Salmonella spp.

### 1 Scope

This International Standard specifies a method for the detection of Salmonella spp. in milk and milk products.

### 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 8261 IDF 122, Milk and milk products — General guidance for the preparation of test samples, initial suspensions and decimal dilutions for microbiological examination.

# 3 Terms and definitions (standards.iteh.ai)

### For the purposes of this International Standard, the following terms and definitions apply.

SIST EN ISO 6785:2007

#### 3.1

https://standards.iteh.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007

#### Salmonella

microorganisms which form typical colonies on solid selective media and which display the biochemical and serological characteristics described when tests are carried out in accordance with this International Standard

#### 3.2

#### detection of Salmonella

detection of the presence or absence of these microorganisms, in a particular mass or volume, when tests are carried out in accordance with this International Standard

### 4 Principle

#### 4.1 General

The detection of *Salmonella* necessitates four successive stages (see annex A).

#### 4.2 Pre-enrichment in non-selective liquid medium

Inoculation of the pre-enrichment medium with the test portion, and incubation at 37  $^{\circ}$ C for 16 h to 20 h.

#### 4.3 Enrichment in selective liquid media

Inoculation of Rappaport-Vassiliadis modified magnesium chloride/malachite green medium and of selenite/cystine medium with the culture obtained in 4.2.

Incubation of the Rappaport-Vassiliadis modified magnesium chloride/malachite green medium in the water bath or incubator (6.4) set at 41,5  $^{\circ}$ C for 24 h and then a further 24 h.

Incubation of the selenite/cystine medium in the incubator (6.3) set at 37 °C for 24 h and then a further 24 h.

#### 4.4 Streaking out and recognition

From the cultures obtained (4.3), inoculation of two selective solid media (brilliant green/phenol red agar and any other suitable solid selective medium).

NOTE Suitable media allow the recovery of lactose-fermenting Salmonella strains.

Incubation of the brilliant green/phenol red agar in the incubator (6.3) set at 37  $^{\circ}$ C and examination after 20 h to 24 h and, if necessary, again after 40 h to 48 h to check the presence of colonies which, from their characteristics, are considered to be presumptive *Salmonella*.

Incubation of the second selective solid medium at the appropriate temperature and examination after the appropriate time to check the presence of colonies which, from their characteristics, are considered to be presumptive *Salmonella*.

### 4.5 Confirmation

Subculturing of colonies of presumptive *Salmonella* (4.4) and confirmation by means of appropriate biochemical and serological tests.

### iTeh STANDARD PREVIEW

# 5 Culture media, reagents and serandards.iteh.ai)

In order to improve the reproducibility of the results, it is recommended that, for the preparation of culture media, dehydrated basic components or dehydrated complete media are used. In that case, follow the manufacturer's instructions rigorously. https://standards.itch.ai/catalog/standards/sist/50439924-a9dd-49fc-9ae5-8a74a2b72f85/sist-en-iso-6785-2007

Use only reagents of recognized analytical grade, unless otherwise specified.

The pH values given refer to a temperature of 25 °C. Adjustments, if necessary, are made by adding either hydrochloric acid [c (HCl) = 1 mol/l] or sodium hydroxide solution [c (NaOH) = 1 mol/l].

If not used immediately, store the prepared culture media and reagents under conditions that do not produce any change in their composition, in the dark at a temperature between 0  $^{\circ}$ C and + 5  $^{\circ}$ C, for no longer than 1 month, unless otherwise stated.

#### 5.1 Water

Use distilled or demineralized water or water of equivalent purity. The water shall be free from substances that might inhibit the growth of microorganisms under the test conditions specified in this International Standard.