

SLOVENSKI STANDARD

SIST EN ISO 7932:2005

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SIST EN ISO 7932:1998

Mikrobiologija živil in krme - Splošno navodilo za štetje domnevno prisotnih *Bacillus cereus* - Štetje kolonij pri 30 °C (ISO 7932:2004)

Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of presumptive *Bacillus cereus* - Colony-count technique at 30 °C (ISO 7932:2004)

Mikrobiologie von Lebensmitteln und Futtermitteln - Horizontales Verfahren zur Zählung von präsumtivem *Bacillus cereus* - Koloniezählverfahren bei 30° C (ISO 7932:2004)

Microbiologie des aliments - Méthode horizontale pour le dénombrement de *Bacillus cereus* présomptifs - Technique par comptage des colonies a 30 °C (ISO 7932:2004)

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07.100.30 Mikrobiologija živil Food microbiology

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EUROPEAN STANDARD

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Microbiology of food and animal feeding stuffs - Horizontal
method for the enumeration of presumptive *Bacillus cereus* -
Colony-count technique at 30 °C (ISO 7932:2004)

Microbiologie des aliments - Méthode horizontale pour le
dénombrement de *Bacillus cereus* présomptifs - Technique
par comptage des colonies à 30 °C (ISO 7932:2004)

This European Standard was approved by CEN on 17 June 2004.

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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 Central Secretariat has the same status as the official versions.

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

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

EN ISO 7932:2004 (E)**Foreword**

This document (EN ISO 7932:2004) has been prepared by Technical Committee ISO/TC 34 "Agricultural food products" in collaboration with Technical Committee CEN/TC 275 "Food analysis - Horizontal methods", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by June 2005, and conflicting national standards shall be withdrawn at the latest by June 2005.

This document supersedes EN ISO 7932 :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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 7932:2004 has been approved by CEN as EN ISO 7932:2004 without any modifications.

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INTERNATIONAL STANDARD

**ISO
7932**

Third edition
2004-06-15

Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of presumptive *Bacillus cereus* — Colony-count technique at 30 °C

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*Microbiologie des aliments — Méthode horizontale pour le
dénombrement de *Bacillus cereus* présomptifs — Technique par
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Contents

Page

Foreword.....	iv
0 Introduction	v
1 Scope.....	1
2 Normative references	1
3 Terms and definitions.....	1
4 Principle	1
5 Dilution fluid, culture media and reagents	2
6 Apparatus and glassware.....	4
7 Sampling	5
8 Preparation of test sample	5
9 Procedure.....	5
9.1 Test portion, initial suspension and dilutions	5
9.2 Inoculation and incubation	5
9.3 Counting of the colonies.....	5
9.4 Confirmation.....	6
10 Expression of results.....	6
10.1 Count of presumptive <i>B. cereus</i> colonies	6
10.2 No colonies	7
10.3 Precision	7
11 Test report.....	8
Annex A (normative) Confidence limits for the estimation of small numbers of colonies.....	9
Annex B (informative) Results of interlaboratory test.....	10
Bibliography	13

ISO 7932:2004(E)

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 7932 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

This third edition cancels and replaces the second edition (ISO 7932:1993) and Technical Corrigendum 1 (ISO 7932:1993/Cor.1:1997).

In this edition the previous confirmation tests [mannitol/egg yolk/polymyxin (MYP) agar medium, glucose fermentation, Voges-Proskauer reaction and nitrate reduction] are replaced by the following:

- haemolysis reaction; <https://standards.iteh.ai/catalog/standards/sist/a747fac5-d5b4-48cd-ad30-64f480d15fe5/sist-en-iso-7932-2005>
- MYP agar medium.

This edition introduces precision data obtained during an interlaboratory trial based on ISO 7932:1993 and using the following confirmation tests: MYP agar medium, glucose agar medium, VP medium and nitrate medium.

0 Introduction

0.1 This International Standard is intended to provide general guidance for the microbiological examination of food products not dealt with by existing International Standards and to be taken into account by organizations preparing microbiological test methods for application to foods or to animal feeding stuffs. Because of the large variety of products within this field of application, these guidelines may not be appropriate in every detail for certain products and for some other products it may be necessary to use different methods. Nevertheless, it is hoped that in all cases every attempt will be made to apply the guidelines provided as far as possible and that deviations from them will only be made if absolutely necessary for technical reasons.

When this International Standard is next reviewed, account will be taken of all information then available regarding the extent to which the guidelines have been followed and the reasons for deviation from them in the case of particular products.

The harmonization of test methods cannot be immediate and, for certain groups of products, International Standards and/or national standards may already exist that do not comply with the guidelines. In cases where International Standards already exist for the product to be tested, they should be followed, but it is hoped that when such standards are reviewed they will be changed to comply with this International Standard so that eventually the only remaining departures from these guidelines will be those necessary for well-established technical reasons.

0.2 It appears that the spores of many, if not most, strains of *B. cereus* germinate readily on the surface of culture media used for enumeration. In most cases there does not seem to be a need for heat shock treatment to provoke germination. Sometimes a heat shock procedure is desirable, for example for spore counts or to inhibit growth of vegetative bacterial cells. In such cases, treatment for 10 min at 80 °C is recommended.

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Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of presumptive *Bacillus cereus* — Colony-count technique at 30 °C

1 Scope

This International Standard specifies a horizontal method for the enumeration of viable presumptive *Bacillus cereus* by means of the colony-count technique at 30 °C. It is applicable to

- products intended for human consumption and the feeding of animals, and
- environmental samples in the area of food production and food handling.

NOTE In order to have a practicable test method, the confirmatory stage has been restricted to the typical aspect on MYP agar and the haemolysis test. Thus the term “presumptive” has been introduced in order to acknowledge the fact that the confirmatory stage does not enable the distinction of *B. cereus* from other closely related but less commonly encountered *Bacillus* species, such as *B. anthracis*, *B. thuringiensis*, *B. weihenstephanensis*, *B. mycoides*. An additional motility test may help to differentiate *B. cereus* from *B. anthracis* in cases where the presence of the latter is suspected.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6887-1:1999, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 1: General rules for the preparation of the initial suspension and decimal dilutions*

ISO 7218:1996, *Microbiology of food and animal feeding stuffs — General rules for microbiological examinations*, and Amd.1:2001

ISO/TS 11133-2:2003, *Microbiology of food and animal feeding stuffs — Guidelines on preparation and production of culture media — Part 2: Practical guidelines on performance testing of culture media*

3 Terms and definitions

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

3.1

presumptive *Bacillus cereus*

microorganism that forms typical colonies on the surface of a selective culture medium and which gives a positive confirmation reaction under the conditions specified in this International Standard

NOTE See Note in Clause 1.

4 Principle

4.1 A specified quantity of the test sample if the initial product is liquid, or a specified quantity of an initial suspension in the case of other products, is surface plated on a solid selective culture medium contained in Petri dishes.