



# SLOVENSKI STANDARD SIST EN ISO 4833-2:2013

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Nadomešča:  
SIST EN ISO 4833:2003

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## Mikrobiologija v prehranski verigi - Horizontalna metoda za ugotavljanje števila mikroorganizmov - 2. del: Štetje kolonij pri 30 oC s tehniko nasajanja na površino (ISO 4833-2:2013)

Microbiology of the food chain - Horizontal method for the enumeration of microorganisms - Part 2: Colony count at 30 degrees C by the surface plating technique (ISO 4833-2:2013)

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Mikrobiologie von Lebensmitteln und Futtermitteln - Horizontales Verfahren für die Zählung von Mikroorganismen - Teil 2: Koloniezählung bei 30 °C mittels Oberflächenverfahren (ISO 4833-2:2013)

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Microbiologie de la chaîne alimentaire - Méthode horizontale pour le dénombrement des micro-organismes - Partie 2: Comptage des colonies à 30 degrés C par la technique d'ensemencement en surface (ISO 4833-2:2013)

**Ta slovenski standard je istoveten z: EN ISO 4833-2:2013**

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07.100.30      Mikrobiologija živil      Food microbiology

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**EN ISO 4833-2**

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Supersedes EN ISO 4833:2003

English Version

**Microbiology of the food chain - Horizontal method for the enumeration of microorganisms - Part 2: Colony count at 30 degrees C by the surface plating technique (ISO 4833-2:2013)**

Microbiologie de la chaîne alimentaire - Méthode horizontale pour le dénombrement des micro-organismes - Partie 2: Comptage des colonies à 30 degrés C par la technique d'ensemencement en surface (ISO 4833-2:2013)

Mikrobiologie von Lebensmitteln und Futtermitteln - Horizontales Verfahren für die Zählung von Mikroorganismen - Teil 2: Koloniezählung bei 30 °C mittels Oberflächenverfahren (ISO 4833-2:2013)

This European Standard was approved by CEN on 26 July 2013.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Foreword

This document (EN ISO 4833-2:2013) has been prepared by Technical Committee ISO/TC 34 "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 March 2014, and conflicting national standards shall be withdrawn at the latest by March 2014.

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 4833:2003, together with EN ISO 4833-1:2013.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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The text of ISO 4833-2:2013 has been approved by CEN as EN ISO 4833-2:2013 without any modification.

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INTERNATIONAL  
STANDARD

ISO  
4833-2

First edition  
2013-09-01

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**Microbiology of the food chain —  
Horizontal method for the  
enumeration of microorganisms —**

**Part 2:  
Colony count at 30 °C by the surface  
plating technique**

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*Microbiologie de la chaîne alimentaire — Méthode horizontale pour  
le dénombrement des micro-organismes —*

*Partie 2: Comptage des colonies à 30 °C par la technique  
d'ensemencement en surface*

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## ISO 4833-2:2013(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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2, [www.iso.org/directives](http://www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received, [www.iso.org/patents](http://www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

This first edition, together with ISO 4833-1, cancels and replaces ISO 4833:2003.

ISO 4833 consists of the following parts, under the general title *Microbiology of the food chain — Horizontal method for the enumeration of microorganisms*.

- Part 1: Colony count at 30 °C by the pour plate technique
- Part 2: Colony count at 30 °C by the surface plating technique

# Microbiology of the food chain — Horizontal method for the enumeration of microorganisms —

## Part 2: Colony count at 30 °C by the surface plating technique

### 1 Scope

This part of ISO 4833 specifies a horizontal method for enumeration of microorganisms that are able to grow and form colonies on the surface of a solid medium after aerobic incubation at 30 °C. The method is applicable to:

- a) products intended for human consumption or for animal feed;
- b) environmental samples in the area of food and feed production and food handling.

This part of ISO 4833 is applicable to:

- 1) products containing heat-sensitive organisms that are likely to form a significant proportion of the total flora (e.g. psychrotrophic organisms in chilled and frozen foods, dried foods, other foods that may contain heat-sensitive organisms);
- 2) products containing obligately aerobic bacteria that are likely to form a significant proportion of the total flora (e.g. *Pseudomonas* spp.);
- 3) products that contain small particles that can prove difficult to distinguish from colonies in a pour plate;
- 4) products whose intense colour prevents the recognition of colonies in a pour plate;
- 5) products for which distinction between different types of colony is required as part of the assessment of food quality.

In addition to the manual spread plating technique, this part of ISO 4833 also specifies the use of a spiral plater, a rapid method of performing surface colony counts ([Annex A](#)).

The applicability of this part of ISO 4833 to the examination of certain fermented food and animal feeds is limited and other media or incubation conditions can be more appropriate. However, this method can be applied to such products even though it is possible that the predominant microorganisms in these products are not detected effectively.

For some matrices, the method described in this part of ISO 4833 can give different results to those obtained using the method described in ISO 4833-1.

### 2 Normative references

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

ISO 6887 (all parts), *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination*

ISO 7218, *Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations*