



NSAI
Standards

Irish Standard
I.S. EN ISO 4833-1:2013

Microbiology of the food chain -
Horizontal method for the enumeration of
microorganisms - Part 1: Colony count at
30 degrees C by the pour plate technique
(ISO 4833-1:2013)

I.S. EN ISO 4833-1:2013

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SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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English Version

Microbiology of the food chain - Horizontal method for the enumeration of microorganisms - Part 1: Colony count at 30 degrees C by the pour plate technique (ISO 4833-1:2013)

Microbiologie de la chaîne alimentaire - Méthode horizontale pour le dénombrement des micro-organismes - Partie 1: Comptage des colonies à 30 degrés C par la technique d'ensemencement en profondeur (ISO 4833-1:2013)

Mikrobiologie von Lebensmitteln und Futtermitteln - Horizontales Verfahren zur Zählung von Mikroorganismen - Teil 1: Koloniezählverfahren bei 30 °C mittels Gussplattenverfahren (ISO 4833-1:2013)

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Contents

Page

Foreword.....3

Foreword

This document (EN ISO 4833-1:2013) 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of an identical text or by endorsement, at the latest by March 2014, and conflicting national standards shall be withdrawn at the latest by March 2014.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 4833-2:2013.

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 4833-1:2013 has been approved by CEN as EN ISO 4833-1:2013 without any modification.

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I.S. EN ISO 4833-1:2013
INTERNATIONAL
STANDARD

ISO
4833-1

First edition
2013-09-01

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

**Part 1:
Colony count at 30 °C by the pour plate
technique**

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

*Partie 1: Comptage des colonies à 30 °C par la technique
d'ensemencement en profondeur*



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Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 Culture media and diluents	2
5.1 General.....	2
5.2 Diluents.....	2
5.3 Agar medium: plate count agar (PCA).....	2
5.4 Overlay medium (if necessary; see 9.2.7).....	3
6 Apparatus	4
7 Sampling	4
8 Preparation of test sample	4
9 Procedure	4
9.1 Test portion, initial suspension and dilutions.....	4
9.2 Inoculation and incubation.....	4
9.3 Counting of colonies.....	5
10 Expression of results	5
10.1 Method of calculation.....	5
10.2 Precision.....	5
10.3 Interpretation of test results.....	6
11 Test report	7
Annex A (informative) Use of the critical difference for the interpretation of results	8
Bibliography	9

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.

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

This first edition, together with ISO 4833-2, 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 1: Colony count at 30 °C by the pour plate technique

1 Scope

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

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

This part of ISO 4833 is applicable to:

- 1) products that require a reliable count when a low limit of detection is specified (below 10^2 /g or 10^2 /ml for liquid samples or below 10^3 /g for solid samples);
- 2) products expected to contain spreading colonies that obscure colonies of other organisms, e.g. milk and milk products likely to contain spreading *Bacillus* spp.

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 those products are not detected effectively.

For some matrices, the method specified in this part of ISO 4833 can give different results to those obtained using the method specified in ISO 4833-2.

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*

ISO 11133, *Microbiology of food, animal feed and water — Preparation, production, storage and performance testing of culture media*

3 Terms and definitions

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

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