

# Australian Standard™

AS 5013.5

## Food microbiology

### Method 5: Microbiology of food and animal feeding stuffs—Horizontal method for the enumeration of microorganisms—Colony count technique at 30°C

#### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FT-004, Food Microbiology, to supersede (in part) AS 1766.1.3:1991, *Food microbiology, Method 1.3: General procedures and techniques—Colony count—Pour plate method*.

This Standard is identical with and reproduced from ISO 4833:2003, *Microbiology of food and animal feeding stuffs—Horizontal method for the enumeration of microorganisms—Colony count technique at 30°C*.

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee FT-004. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify a horizontal method for the enumeration of microorganisms, by counting the colonies growing in a solid medium after aerobic incubation at 30°C.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text, 'this International Standard' should read 'this Australian Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.
- (d) Substitute 'mL' for 'ml' wherever it appears.

References to International Standards should be replaced by references to equivalent Australian Standards as follows:

<i>Reference International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
6887	Microbiology of food and animal feeding stuffs—Preparation of test samples, initial suspension and decimal dilutions for microbiological examination	5013	Food microbiology
6887-1	Part 1: General rules for the preparation of the initial suspension and decimal dilutions	5013.11.1	Method 11.1: Microbiology of food and animal feeding stuffs—Preparation of test samples, initial suspension and decimal dilutions for microbiological examination—General rules for the preparation of the initial suspension and decimal dilutions

ISO 8261	Milk and milk products—General guidance for the preparation of test samples	AS 5013.17	Method 17: Milk and milk products— General guidance for the preparation of test samples, initial suspensions and decimal dilutions for microbiological examination
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With the exception of the above ISO documents, which have been adopted as Australian Standards, the ISO documents listed as normative references in Clause 2 have not been adopted as Australian Standards.

The laboratory should have a clearly defined quality control system to ensure that the apparatus, culture media, reagents and technique are suitable for the test. The use of positive controls is part of this system.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

## INTRODUCTION

Because of the large variety of food and feed products, this horizontal method may not be appropriate in every detail for certain products. In this case, different methods which are specific to these products may be used if absolutely necessary for justified technical reasons. Nevertheless, every attempt should be made to apply this horizontal method as far as possible.

When this International Standard is next reviewed, account will be taken of all information then available regarding the extent to which this horizontal method has been followed and the reasons for deviations 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 this horizontal method. In cases where International Standards already exist for the product to be tested, they should be followed. 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 this horizontal method will be those necessary for well-established technical reasons.



## 1 Scope

This International Standard specifies a horizontal method for the enumeration of microorganisms, by counting the colonies growing in a solid medium after aerobic incubation at 30 °C. Subject to the limitations discussed in the introduction, this International Standard is applicable to products intended for human consumption or the feeding of animals.

The applicability of this International Standard to the examination of certain fermented food and animal feeding stuffs is limited. For the examination of fermented food and animal feeding stuffs, other media and/or incubation conditions might be more appropriate.

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

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

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

ISO/TS 11133-1, *Microbiology of food and animal feeding stuffs — Guidelines on preparation and production of culture media — Part 1: General guidelines on quality assurance for the preparation of culture media in the laboratory*

## 3 Term and definition

For the purposes of this document, the following term and definition applies.

### 3.1

#### **microorganism**

bacteria, yeast and mould-forming countable colony, produced under the conditions specified in this International Standard