

Australian Standard™

Food microbiology

Method 10: Microbiology of food and animal feeding stuffs—Horizontal method for the detection of *Salmonella* spp.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FT-004, Food Microbiology, to supersede AS 1766.2.5—1991, *Food microbiology, Method 2.5: Examination for specific organisms—Salmonellae*.

This Standard incorporates Amendment No. 1 (July 2005). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard is identical with and reproduced from ISO 6579:2002, *Microbiology of food and animal feeding stuffs—Horizontal method for the detection of Salmonella* spp. and its Corrigendum 1, ISO 6579:2002/Cor.1:2004, which is added after the main source text. The Corrigendum corrects Clause B.3.1.2; the pH value is changed from 8.2 ± 0.2 to 8.0 ± 0.2 at 25°C.

This Standard was prepared by 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 detection of *Salmonella*, including *Salmonella* Typhi and *Salmonella* Paratyphi.

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 the ‘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		AS	
7218	Microbiology of food and animal feeding stuffs—General rules for microbiological examinations	5013.14	Method 14: Microbiology of food and animal feeding stuffs—General rules for microbiological examination
8261	Milk and milk products—General guidance for the preparation of test samples, initial suspensions and decimal dilutions for microbiological examination	5013.17	Method 17: Milk and milk products—Preparation of samples and dilutions for microbiological examination

For testing of certain dairy products, alternative enrichment plating media and alternative selective media are described in ISO 6785:2001, *Milk and milk products—Detection of Salmonella*.

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.

In Clause 9.5.6 Definitive confirmation, strains which are considered to be *Salmonella*, or which may be *Salmonella* need to be sent to one of the *Salmonella* reference centres listed below for the identification:

NSW Enteric Reference Laboratory
 Centre for Infectious Diseases & Microbiology Laboratory Services
 ICPMR (Building 7)
 Westmead Hospital
 Institute Road
 WESTMEAD NSW 2145

Salmonella Reference Laboratory
 IMVS
 Frome Road
 ADELAIDE SA 5000

Enteric Laboratory
 PathCentre
 Room G.25
 Ground Floor 'K' Block
 Hospital Avenue
 NEDLANDS WA 6009

Public Health Laboratory
 Queensland Health Scientific Services
 39 Kessels Road
 COOPERS PLAIN QLD 4108

MDU Public Health Laboratory
Department of Microbiology & Immunology
Gate 11, Royal Parade
UNIVERSITY OF MELBOURNE VIC 3010

NOTE: Instructions for packing perishable biological substances, specimens, viruses and vaccines are given in the Australia Post Postal Guide.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas 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 this method 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. 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.

WARNING — In order to safeguard the health of laboratory personnel, it is essential that tests for detecting *Salmonella*, and especially *Salmonella* Typhi and *Salmonella* Paratyphi, are only undertaken in properly equipped laboratories, under the control of a skilled microbiologist, and that great care is taken in the disposal of all incubated materials.

1 Scope

This International Standard specifies a horizontal method for the detection of *Salmonella*, including *Salmonella* Typhi and *Salmonella* Paratyphi.

Subject to the limitations discussed in the Introduction, this International Standard is applicable to

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

WARNING — The method may not recover all *Salmonella* Typhi and Paratyphi.

2 Normative references

The following normative documents contain 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 editions of the normative documents 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 6887-1, *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*

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

3 Terms and definitions

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

3.1

Salmonella

microorganisms which form typical or less 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