



**Food microbiology—Meat and  
meat products**

**Part 21: Enumeration of presumptive  
*Pseudomonas* spp.**

STANDARDS  
Australia



AS 5013.21:2017

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Meat and Livestock Australia  
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## Preface

This Standard was prepared by the Standards Australia Committee FT-035, Food Microbiology, to supersede AS 5013.21—2004 *Food microbiology, Method 21: Meat and meat products— Enumeration of Pseudomonas spp.*

The objective of this Standard is to specify a method for the enumeration of presumptive *Pseudomonas* spp. present in meat and meat products, including poultry.

This Standard is identical with, and has been reproduced from, ISO 13720:2010, *Meat and meat products — Enumeration of presumptive Pseudomonas spp.*

As this document has been reproduced from an International Standard, the following applies:

- (a) In the source text 'this International Standard' should read 'this Australian Standard'
- (b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific.

The terms 'normative' and 'informative' are used in Standards to define the application of the appendices or annexes to which they apply. A 'normative' appendix or annex is an integral part of a Standard, whereas an 'informative' appendix or annex is only for information and guidance.

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## 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 13720 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

This second edition cancels and replaces the first edition (ISO 13720:1995), which has been technically revised.

# Australian Standard®

## Food microbiology—Meat and meat products

### Part 21: Enumeration of presumptive *Pseudomonas* spp.

#### 1 Scope

This International Standard specifies a method for the enumeration of presumptive *Pseudomonas* spp. present in meat and meat products, including poultry.

#### 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, *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 6887-2, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 2: Specific rules for the preparation of meat and meat products*

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

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*

ISO/TS 11133-2, *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 *Pseudomonas* spp.**

bacteria which at 25 °C form colonies in cephalothin-sodium fusidate-cetrimide (CFC) agar and which show a positive oxidase reaction when tested according to the method described in this International Standard

#### 4 Principle

An initial suspension and decimal dilutions are prepared from the test sample.

The solid selective medium, CFC agar, is inoculated with a specified quantity of the initial suspension of the product.

Other plates are prepared under the same conditions, using decimal dilutions of the initial suspension.

The plates are incubated at 25 °C for 44 h ± 4 h.

Colonies of presumptive *Pseudomonas* spp. are confirmed by the oxidase test (positive).