



Food microbiology

**Method 11.5: Microbiology of food and animal feeding stuffs —
Preparation of test samples, initial suspension and decimal dilutions for
microbiological examination — Specific rules for the preparation of milk
and milk products (ISO 6887-5:2020, MOD)**



AS 5013.11.5:2024

This Australian Standard ® was prepared by FT-035, Food Microbiology. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 03 April 2024.

This Standard was published on 19 April 2024.

The following are represented on Committee FT-035:

ACT Health Directorate
Australian Society for Microbiology Incorporated
CSIRO
Dairy Industry Association of Australia
Department of Agriculture, Fisheries and Forestry
Department of Health (TAS)
National Association of Testing Authorities Australia
National Measurement Institute
PathWest Laboratory Medicine WA
Queensland Health Forensic and Scientific Services
The University of Melbourne

This Standard was issued in draft form for comment as DR AS 5013.11.5.:2023.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

ISBN 978 1 76139 588 8

Food microbiology

Method 11.5: Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Specific rules for the preparation of milk and milk products (ISO 6887-5:2020, MOD)

Originated as part of AS 1095.1—1971, AS 1766.1—1975, AS 1095.2.3 and AS 1095.2—1971.
Revised, amalgamated and redesignated as AS 5013.11.5—2012.
Second edition 2024.

COPYRIGHT

© ISO 2024 — All rights reserved
© Standards Australia Limited 2024

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

Preface

This Standard was prepared by the Standards Australia Committee FT-035, Food Microbiology, to supersede AS 5013.11.5—2012 *Food microbiology, Method 11.5: Microbiology of food and animal feeding stuffs—Preparation of test samples, initial suspension and decimal dilutions for microbiological examination—Specific rules for the preparation of milk and milk products (ISO 6887-5:2010, MOD)*.

The objective of this document is to specify rules for the preparation of samples of milk and milk products and their suspensions for microbiological examination when the samples require a different preparation from the general methods specified in AS 5013.11.1.

A list of all parts in the AS 5013 series can be found in the [Standards Australia online catalogue](#).

This document is an adoption with national modifications, and has been reproduced from, ISO 6887-5:2020, *Microbiology of the food chain — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 5: Specific rules for the preparation of milk and milk products*.

The modifications are additional requirements and are set out in [Appendix ZZ](#).

[Appendix ZZ](#) lists the modifications to ISO 6887-5:2020, for the application of this document in Australia.

As this document has been reproduced from an International document, a full point substitutes for a comma when referring to a decimal marker.

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

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.

Contents

Preface	ii
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Principle	2
5 Diluents	2
5.1 List of diluents	2
5.2 Distribution and sterilization of the diluents	5
5.3 Performance testing for diluents	5
6 Apparatus	5
7 Sampling	6
8 General procedures	6
8.1 General	6
8.2 Frozen products	6
8.3 Hard and dry products	6
8.4 Liquid and non-viscous products	6
8.5 Multi-component products	6
8.6 Acidic products	6
8.7 High-fat foods (fat content > 20 % mass fraction)	6
9 Specific procedures	6
9.1 Milk and liquid milk products	6
9.2 Dehydrated milk, dehydrated sweet whey, dehydrated acid whey, dehydrated buttermilk and lactose	7
9.3 Cheese and cheese products	7
9.4 Acid casein, lactic casein, rennet casein and caseinate	7
9.4.1 General case	7
9.4.2 Special case: Rennet casein	8
9.5 Butter	8
9.6 Milk-based ice-cream	8
9.7 Milk-based custard, desserts and sweet cream (pH > 5)	8
9.8 Milk-based fermented milks, yogurt, probiotics milk products and sour cream (pH < 5)	9
9.9 Dehydrated milk-based infant foods with or without probiotics	9
10 Further decimal dilutions	9
Bibliography	10
Appendix ZZ (normative) Modifications to ISO 6887-5:2020 for Australia	11

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 (see 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 (see 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.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 463, *Microbiology of the food chain*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 6887-5:2010), which has been technically revised. The main changes compared with the previous edition are as follows:

- the document has been aligned with ISO 6887-1, ISO 6887-2, ISO 6887-3 and ISO 6887-4;
- cross references have been added to ISO 6887-1 where relevant.

A list of all parts in the ISO 6887 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.