



BSI Standards Publication

Microbiology of the food chain — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination

Part 4: Specific rules for the preparation of miscellaneous products

This is a preview of "BS EN ISO 6887-4:201...". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN ISO 6887-4:2017. It is identical to ISO 6887-4:2017. It supersedes BS EN ISO 6887-4:2003+A1:2011 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee AW/9, Microbiology.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2017
Published by BSI Standards Limited 2017

ISBN 978 0 580 83581 0

ICS 07.100.30

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 June 2017.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

This is a preview of "BS EN ISO 6887-4:201...". Click here to purchase the full version from the ANSI store.

EUROPÄISCHE NORM

April 2017

ICS 07.100.30

Supersedes EN ISO 6887-4:2003

English Version

Microbiology of the food chain - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination - Part 4: Specific rules for the preparation of miscellaneous products (ISO 6887-4:2017)

Microbiologie de la chaîne alimentaire - Préparation des échantillons, de la suspension mère et des dilutions décimales en vue de l'examen microbiologique - Partie 4: Règles spécifiques pour la préparation de produits variés (ISO 6887-4:2017)

Mikrobiologie der Lebensmittelkette - Vorbereitung von Untersuchungsproben und Herstellung von Erstverdünnungen und von Dezimalverdünnungen für mikrobiologische Untersuchungen - Teil 4: Spezifische Regeln für die Vorbereitung von sonstigen Erzeugnissen (ISO 6887-4:2017)

This European Standard was approved by CEN on 14 January 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

This is a preview of "BS EN ISO 6887-4:201...". [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document (EN ISO 6887-4:2017) 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 October 2017, and conflicting national standards shall be withdrawn at the latest by October 2017.

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 6887-4:2003.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 6887-4:2017 has been approved by CEN as EN ISO 6887-4:2017 without any modification.

This is a preview of "BS EN ISO 6887-4:201...". Click here to purchase the full version from the ANSI store.

Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Principle	2
5 Diluents	2
5.1 Basic materials.....	2
5.2 Diluents for general use.....	2
5.2.1 Peptone salt solution.....	2
5.2.2 Buffered peptone water.....	2
5.3 Diluents for special purposes.....	3
5.3.1 Double-strength buffered peptone water.....	3
5.3.2 Phosphate buffered diluent.....	3
5.4 Distribution and sterilization of the diluent.....	3
5.5 Performance testing of diluents.....	3
5.6 Enzyme solutions.....	3
5.6.1 Alpha-amylase solution.....	3
5.6.2 Cellulase solution.....	4
5.6.3 Papain solution.....	4
6 Apparatus	4
7 Sampling and sample types	5
8 Preparation of samples	5
8.1 General.....	5
8.2 Acidic products.....	5
8.3 High-fat foods, excluding margarines and spreads (e.g. over 20 % of total mass as fat).....	6
8.4 Hard and dry products.....	6
9 Specific procedures	6
9.1 Dehydrated and low a_w products.....	6
9.1.1 General.....	6
9.1.2 Apparatus.....	6
9.1.3 Preparation of samples.....	7
9.1.4 Preparation of initial suspension.....	7
9.1.5 Resuscitation.....	8
9.1.6 Water activity.....	8
9.2 Flours, cereal grains and by-products and animal feeds.....	9
9.3 Gelatine (powdered and leaf).....	10
9.3.1 Preparation of samples.....	10
9.3.2 Preparation of initial suspension.....	10
9.4 Margarine and spreads.....	10
9.4.1 Sampling.....	10
9.4.2 Preparation of test sample.....	11
9.5 Eggs and egg products.....	11
9.5.1 Fresh whole eggs.....	11
9.5.2 Microflora of whole egg shell.....	12
9.5.3 Internal microflora.....	12
9.5.4 Bulk whole liquid egg, egg white and egg yolk.....	12
9.5.5 Dehydrated whole egg and dried egg white.....	12
9.5.6 Whole egg microflora (shell plus yolk plus white).....	12
9.6 Bakery goods, pastry and cakes.....	13
9.6.1 General.....	13
9.6.2 Preparation of samples.....	13

This is a preview of "BS EN ISO 6887-4:201...". Click here to purchase the full version from the ANSI store.

9.7	Fresh fruit and vegetables (pre-packed)	13
9.7.1	Sample preparation of multi-component products	13
9.7.2	Pre-packed products of one type of fruit or vegetable	13
9.8	Fermented products or other products containing viable microorganisms	13
9.8.1	General	13
9.8.2	Diluent	14
9.9	Beverages (alcoholic and non-alcoholic drinks and bottled waters, still or carbonated)	14
9.9.1	General	14
9.9.2	De-gassing by inversion and mixing	14
9.9.3	De-gassing using ultrasound	14
9.10	Alternative protein products (cooked insects, textured vegetable protein or mycoprotein)	14
9.10.1	General	14
9.10.2	Cooked insects	14
9.10.3	Textured vegetable protein and mycoprotein	15
10	Further dilutions	15
	Bibliography	16

This is a preview of "BS EN ISO 6887-4:201...". Click here to purchase the full version from the ANSI store.

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 on 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 the following URL: www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO 6887-4:2003), which has been technically revised.

It also incorporates the Amendment ISO 6887-4:2003/Amd.1:2011 and the Technical Corrigendum ISO 6887-4:2003/Cor.1:2004.

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

This is a preview of "BS EN ISO 6887-4:201...". [Click here to purchase the full version from the ANSI store.](#)

This is a preview of "BS EN ISO 6887-4:201...". Click here to purchase the full version from the ANSI store.

Microbiology of the food chain — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination —

Part 4: Specific rules for the preparation of miscellaneous products

WARNING — The use of this document may involve hazardous materials, operations and equipment. It is the responsibility of the user of this document to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before use.

1 Scope

This document specifies rules for the preparation of samples and dilutions for the microbiological examination of specific food products not covered in other parts of ISO 6887, which deal with more general categories. This document covers a wide range of miscellaneous products, but does not include new products brought on to the market after publication.

ISO 6887-1 defines the general rules for the preparation of the initial suspension and dilutions for microbiological examination.

This document excludes preparation of samples for both enumeration and detection test methods when preparation details are specified in the relevant International Standards.

This document is applicable to the following products:

- acidic (low pH) products;
- hard and dry products;
- dehydrated, freeze-dried and other low a_w products (including those with inhibitory properties);
- flours, whole cereal grains, cereal by-products;
- animal feed, cattle cake, kibbles and pet chews;
- gelatine (powdered and leaf);
- margarines, spreads and non-dairy products with added water;
- eggs and egg products;
- bakery goods, pastries and cakes;
- fresh fruit and vegetables;
- fermented products and other products containing viable microorganisms;
- alcoholic and non-alcoholic beverages;
- alternative protein products.