



NSAI
Standards

Irish Standard
I.S. EN ISO 7218:2007&A1:2013

Microbiology of food and animal feeding stuffs - General requirements and guidance for microbiological examinations (ISO 7218:2007)

I.S. EN ISO 7218:2007&A1:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN ISO 7218:2007/A1:2013

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It has been brought to our attention that this document, issued on 2013-08-07, requires modification.

On 2014-04-15 ISO issued corrected English and French versions.

Please find enclosed the updated English and French EN ISO versions.

We apologise for any inconvenience this may cause.

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EUROPEAN STANDARD

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NORME EUROPÉENNE

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August 2013

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Microbiology of food and animal feeding stuffs - General requirements and guidance for microbiological examinations - Amendment 1 (ISO 7218:2007/Amd 1:2013, Corrected version 2014-04-15)

Microbiologie des aliments - Exigences générales et recommandations - Amendement 1 (ISO 7218:2007/Amd 1:2013, Version corrigée 2014-04-15)

Mikrobiologie von Lebensmitteln und Futtermitteln - Allgemeine Anforderungen und Leitlinien für mikrobiologische Untersuchungen - Änderung 1 (ISO 7218:2007/Amd 1:2013, korrigierte Fassung 2014-04-15)

This amendment A1 modifies the European Standard EN ISO 7218:2007; it was approved by CEN on 15 June 2013.

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EN ISO 7218:2007/A1:2013 (E)

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Foreword

This document (EN ISO 7218:2007/A1:2013) 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of an identical text or by endorsement, at the latest by February 2014, and conflicting national standards shall be withdrawn at the latest by February 2014

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Endorsement notice

The text of ISO 7218:2007/Amd 1:2013, Corrected version 2014-04-15 has been approved by CEN as EN ISO 7218:2007/A1:2013 without any modification.

EUROPEAN STANDARD

EN ISO 7218

NORME EUROPÉENNE

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August 2007

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English Version

**Microbiology of food and animal feeding stuffs - General
requirements and guidance for microbiological examinations
(ISO 7218:2007)**

Microbiologie des aliments - Exigences générales et
recommandations (ISO 7218:2007)

Mikrobiologie von Lebensmitteln und Futtermitteln -
Allgemeine Anforderungen und Anleitung für
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EN ISO 7218:2007 (E)

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Foreword

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Endorsement notice

The text of ISO 7218:2007 has been approved by CEN as a EN ISO 7218:2007 without any modification.

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INTERNATIONAL STANDARD

ISO 7218

Third edition
2007-08-15

Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations

*Microbiologie des aliments — Exigences générales et
recommandations*



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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.

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ISO 7218 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*, in collaboration with CEN Technical Committee CEN/TC 275, *Food analysis — Horizontal methods*.

This third edition cancels and replaces the second edition (ISO 7218:1996), which has been technically revised. It also incorporates the Amendment ISO 7218:1996/Amd.1:2001.

ISO 7218:2007(E)

Introduction

When conducting microbiological examinations, it is especially important that

- only those microorganisms which are present in the samples are isolated and enumerated;
- the microorganisms do not contaminate the environment.

In order to achieve this, it is necessary to pay attention to personal hygiene and to use working techniques which ensure, as far as possible, exclusion of extraneous contamination.

Since, in this International Standard, it is possible to give only a few examples of the precautions to be taken during microbiological examinations, a thorough knowledge of the microbiological techniques and of the microorganisms involved is essential. It is important that the examinations are conducted as accurately as possible, including monitoring and recording aspects that may affect results and calculation of the number of microorganisms and the uncertainty of the results.

Ultimately, it is the responsibility of the head of the laboratory to judge whether the manipulations are safe and can be considered to be good laboratory practice.

A large number of manipulations can, for example, unintentionally lead to cross-contamination, and the analyst should always verify the accuracy of the results given by his or her technique.

In order to conduct the examinations correctly, it is necessary to take certain precautions when constructing and equipping the laboratory.

Certain precautions must be taken, not only for reasons of hygiene, but also to ensure good reproducibility of the results. It is not possible to specify all the precautions to be taken in all circumstances, but this International Standard at least provides the main measures to be taken when preparing, sterilizing, storing the media, and using the equipment.

If the guidance given in this International Standard is followed, this will also contribute towards maintaining the health and safety of personnel. Additional information on this subject is to be found in the literature listed in the Bibliography.

In order to distinguish the guidance in this International Standard, it has been printed in a different typeface (Times New Roman).

Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations

1 Scope

This International Standard gives general requirements and guidance/options intended for three main uses:

- implementation of ISO/TC 34/SC 9 or ISO/TC 34/SC 5 standards for detection or enumeration of microorganisms, named hereafter “specific standards”;
- good laboratory practice for food microbiological laboratories (the purpose is not to detail them in this International Standard, manuals are available for that purpose);
- guidance for accreditation of food microbiological laboratories (this International Standard describes the technical requirements according to Annex B of ISO/IEC 17025:2005 for the accreditation of a microbiological laboratory by national organizations).

The requirements of this International Standard supersede the corresponding ones of existing specific standards.

Additional instructions in the field of molecular biology examinations are specified in ISO 22174.

This International Standard covers examination for bacteria, yeasts and moulds and can be used if supplemented with specific guidance for prions, parasites and viruses. It does not cover the examination for toxins or other metabolites (e.g. amines) from microorganisms.

This International Standard applies to the microbiology of food, animal feeding stuffs, the food production environment and the primary production environment.

The purpose of this International Standard is to help to ensure the validity of food microbiology examinations, to assist in ensuring that the general techniques used for conducting these examinations are the same in all laboratories, to help achieve homogeneous results in different laboratories, and to contribute towards the safety of the laboratory personnel by preventing risks of infection.

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 835 (all parts), *Laboratory glassware — Graduated pipettes*

ISO 6887 (all parts), *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination*

ISO 8199, *Water quality — General guidance on the enumeration of micro-organisms by culture*

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

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