



SLOVENSKI STANDARD

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Mikrobiologija v prehranski verigi - Splošne zahteve in smernice za mikrobiološke preiskave (ISO 7218:2024)

Microbiology of the food chain - General requirements and guidance for microbiological examinations (ISO 7218:2024)

Mikrobiologie der Lebensmittelkette - Allgemeine Anforderungen und Leitlinien für mikrobiologische Untersuchungen (ISO 7218:2024)

Microbiologie de la chaîne alimentaire - Exigences générales et recommandations pour les examens microbiologiques (ISO 7218:2024)

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Microbiology of the food chain - General requirements and
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Microbiologie de la chaîne alimentaire - Exigences
générales et recommandations pour les examens
microbiologiques (ISO 7218:2024)

Mikrobiologie der Lebensmittelkette - Allgemeine
Anforderungen und Leitlinien für mikrobiologische
Untersuchungen (ISO 7218:2024)

This European Standard was approved by CEN on 28 April 2024.

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Contents	Page
European foreword.....	3

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European foreword

This document (EN ISO 7218:2024) has been prepared by Technical Committee ISO/TC 34 "Food products" in collaboration with Technical Committee CEN/TC 463 "Microbiology of the food chain" the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by January 2025, and conflicting national standards shall be withdrawn at the latest by January 2025.

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International Standard

ISO 7218

Microbiology of the food chain — General requirements and guidance for microbiological examinations

*Microbiologie de la chaîne alimentaire — Exigences générales et
recommandations pour les examens microbiologiques*

**Fourth edition
2024-06**

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Contents

Page

Foreword	vii
Introduction	viii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Premises	5
4.1 General	5
4.2 Biosafety considerations	5
4.3 Laboratory design	5
4.4 Laboratory areas	5
4.4.1 General	5
4.4.2 Areas associated with samples and testing	6
4.4.3 General areas	6
4.5 Layout and fittings of the premises	6
4.5.1 Objectives	6
4.5.2 Fittings	7
4.5.3 Other arrangements for laboratory premises	7
4.5.4 Cleaning and disinfection	8
5 Personnel	8
5.1 General	8
5.2 Competence	8
5.3 Verification of ongoing staff competence	9
5.4 Hygiene	9
6 Equipment and consumables	9
6.1 General	9
6.2 Sterilization and other heating equipment	10
6.2.1 General	10
6.2.2 Autoclave	10
6.2.3 Culture media preparator	11
6.2.4 Steamers, including boiling-water baths	12
6.2.5 Sterilizing oven	12
6.2.6 Microwave oven	13
6.2.7 Hotplate, induction cooker and heating mantle	14
6.2.8 Gas burner or wire incinerator	14
6.3 Temperature controlled equipment and monitoring devices	15
6.3.1 General	15
6.3.2 Incubator	15
6.3.3 Thermostatically controlled bath	16
6.3.4 Heating blocks	17
6.3.5 Refrigerators and cold-storage rooms	18
6.3.6 Freezer and deep freezer/ultra-low temperature freezer	19
6.3.7 Temperature-monitoring devices, including automatic recorders	19
6.3.8 Balances and gravimetric diluters	20
6.4 Defined volume inoculation equipment	21
6.4.1 Pipettes and pipettors	21
6.4.2 Dispensers	22
6.4.3 Spiral platers	23
6.4.4 Serial diluters	24
6.5 Protective cabinets	24
6.5.1 Description	24
6.5.2 Use	25
6.5.3 Cleaning and disinfection	25
6.5.4 Maintenance and inspection	26

ISO 7218:2024(en)

6.6	Homogenizers, blenders, mixers and shakers	26
6.6.1	Homogenizers and blenders.....	26
6.6.2	Vortex mixers	27
6.7	Still, deionizers and reverse-osmosis units	28
6.7.1	Description	28
6.7.2	Use	28
6.7.3	Maintenance	28
6.7.4	Verification	28
6.8	Separation and concentration equipment	28
6.8.1	Immunomagnetic separator (IMS).....	28
6.8.2	Centrifuge	29
6.8.3	Filtration systems	29
6.9	Modified atmosphere equipment.....	29
6.9.1	Description	29
6.9.2	Use	29
6.9.3	Maintenance	30
6.9.4	Verification	30
6.10	Other equipment	30
6.10.1	pH meter	30
6.10.2	Colony-counting device	31
6.10.3	Timers and timing devices	31
6.10.4	Optical microscope.....	32
6.10.5	Glass washers, glassware and other laboratory ware	32
6.10.6	Disposable equipment and consumables	33
6.10.7	Other equipment and software	34
7	Sterilization/decontamination and disposal of laboratory materials	34
7.1	Sterilization	34
7.1.1	General	34
7.1.2	Sterilization by dry heat	34
7.1.3	Sterilization by moist heat (steam).....	34
7.2	Decontamination and disinfection	34
7.2.1	Decontamination of glassware and materials before use	34
7.2.2	Decontamination of glassware and materials after use	34
7.3	Waste management	35
7.4	Washing	35
8	Preparation and use of culture media and reagents	35
9	Laboratory samples	36
9.1	Sampling techniques and sampling plans	36
9.1.1	General	36
9.1.2	Sampling	36
9.2	Sample transport	36
9.3	Sample receipt	37
9.4	Sample handling	37
9.4.1	General	37
9.4.2	Storage before examination	38
9.4.3	Test portions	38
9.4.4	Storage of laboratory samples after examination	38
9.5	Pre-testing of samples	38
10	Examination	39
10.1	Hygienic precautions during sample preparation and examination	39
10.1.1	General	39
10.1.2	Basic precautions	39
10.1.3	Sample handling	39
10.1.4	Sample handling tools and implements	40
10.1.5	Spillages	40
10.1.6	Process controls	40
10.1.7	Aerosols	40

ISO 7218:2024(en)

10.1.8	Molecular methods.....	41
10.2	Preparation of initial suspension and dilutions.....	41
10.2.1	General.....	41
10.2.2	Concentration.....	41
11	Enumeration (quantitative) methods.....	41
11.1	General.....	41
11.2	Enumeration using a solid medium.....	42
11.2.1	General.....	42
11.2.2	Pour plate technique.....	42
11.2.3	Surface plating techniques.....	43
11.2.4	Enumeration of yeasts and moulds.....	44
11.2.5	Incubation.....	45
11.2.6	Calculation and expression of results obtained with solid culture media.....	45
11.2.7	Calculations for enumeration methods.....	47
11.3	Enumeration using liquid media.....	54
11.3.1	Principle.....	54
11.3.2	General MPN procedure.....	54
11.3.3	Limitations of MPN.....	54
11.3.4	Inoculation procedure.....	55
11.3.5	Choice of MPN configuration.....	55
11.3.6	Incubation.....	56
11.3.7	Interpretation and expression of results.....	56
11.3.8	Determination of MPN values using MPN calculators.....	56
11.3.9	Rarity categories.....	57
11.4	Estimates of uncertainty of test results.....	57
12	Detection (qualitative) methods.....	58
12.1	General.....	58
12.2	Principle.....	58
13	Confirmation and identification methods.....	58
13.1	General.....	58
13.2	Preparation of a pure culture.....	59
13.3	Confirmation methods.....	59
13.3.1	Latex agglutination test.....	59
13.3.2	Nucleic acid hybridization or molecular amplification methods.....	59
13.3.3	Slide agglutination tests.....	60
13.4	Identification methods.....	60
13.4.1	Biochemical galleries.....	60
13.4.2	DNA sequencing.....	60
13.4.3	Mass spectrometry.....	61
14	Selection and characterization of control microorganisms.....	61
14.1	General.....	61
14.2	Characterization of microorganisms.....	62
14.2.1	General.....	62
14.2.2	Phenotypic characterization.....	62
14.2.3	Molecular characterization.....	62
14.3	Selection of control microorganisms.....	62
15	Test report.....	63
16	Laboratory quality control in microbiology.....	64
16.1	General.....	64
16.2	Internal quality control.....	65
16.2.1	General.....	65
16.2.2	Process controls.....	65
16.2.3	Replicate testing.....	66
16.2.4	Spiked samples.....	66
16.2.5	IQC assessment using control charts.....	66
16.3	External quality assessment.....	66

ISO 7218:2024(en)

17	Validation and verification of microbiological methods	67
17.1	General	67
17.2	Performance characteristics	67
17.3	Validation	67
17.4	Verification	68
Annex A	(informative) Properties of disinfectants	69
Annex B	(informative) Confidence intervals for colony count technique	70
Annex C	(normative) General confirmation tests	73
Bibliography		78

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN ISO 7218:2024](https://standards.iteh.ai/catalog/standards/sist/482ca895-7a73-4774-8190-995e94362aaf/sist-en-iso-7218-2024)

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ISO 7218:2024(en)

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).

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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 fourth edition cancels and replaces the third edition (ISO 7218:2007), which has been technically revised. It also incorporates the Amendment ISO 7218:2007/Amd 1:2013.

The main changes are as follows:

- the calculations section has been simplified and two further calculators have been added;
- the equipment section has been reorganized into groups with similar purposes and requirements;
- cross-references have been added to other general microbiology standards such as those for media, validation and verification, and uncertainty to reduce repetition;
- information on laboratory quality control and characterization of control microorganisms has been added.

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.

ISO 7218:2024(en)

Introduction

When conducting microbiological examinations, it is especially important that:

- only those microorganisms present in the samples are detected and/or enumerated;
- these microorganisms do not contaminate the environment.

To achieve this, good laboratory practices are essential, including personal hygiene and aseptic working techniques which exclude extraneous contamination as far as possible.

Only limited information on the precautions to be taken during microbiological examinations is given in this document, so a thorough knowledge of the microbiological techniques and microorganisms involved is essential. It is important that examinations are conducted safely, correctly and as carefully as possible, including monitoring and recording aspects that can affect results, calculating numbers of microorganisms and assessing the uncertainty of test results.

The most common risks and their control in the microbiological laboratory are given in this document. However, work processes in each laboratory can differ and appropriate risk analysis should be considered to ensure good laboratory practices. Periodic evaluation and control of critical points not only maintains safe and hygienic practices but can also improve reliability of test results.

The purpose of this document is to help to ensure the validity of microbiology examinations in the food chain. In particular, to ensure that general techniques for conducting examinations are the same in all laboratories, to achieve consistent results in different laboratories and to contribute to safety of laboratory personnel by preventing risks of infection.

This document includes the main measures necessary for conducting the wide range of microbiological examinations. Additional information is available from the literature listed in the Bibliography (see References [43] to [47]).

In this document, the following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.

In addition, the imperative mood is used to give instructions or where actions are required.