

**Microbiology of food, animal feed and water -
Preparation, production, storage and performance
testing of culture media
(ISO 11133:2014, Corrected version 2014-11-01)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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production, storage and performance testing of culture media
(ISO 11133:2014, Corrected version 2014-11-01)**

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performance des milieux de culture (ISO 11133:2014,
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Mikrobiologie von Lebensmitteln, Futtermitteln und Wasser
- Vorbereitung, Herstellung, Lagerung und
Leistungsprüfung von Nährmedien (ISO 11133:2014,
korrigierte Fassung 2014-11-01)

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Contents

Page

Foreword.....3

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Foreword

This document (EN ISO 11133:2014) 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of an identical text or by endorsement, at the latest by November 2014, and conflicting national standards shall be withdrawn at the latest by November 2014.

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Endorsement notice

The text of ISO 11133:2014, Corrected version 2014-11-01 has been approved by CEN as EN ISO 11133:2014 without any modification.

Contents

Page

Foreword	v
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
3.1 General terms and definitions.....	2
3.2 Terminology of performance testing.....	2
3.3 Terminology of culture media.....	3
3.4 Terminology for test microorganisms.....	6
4 Quality assurance management	7
4.1 Documentation.....	7
4.2 Storage.....	8
4.3 Laboratory preparation of media.....	8
4.4 Storage and shelf-life of prepared media.....	11
4.5 Preparation for use.....	12
4.6 Incubation of solid media in Petri dishes.....	14
4.7 Disposal of media.....	14
5 Test organisms for performance testing	14
5.1 General.....	14
5.2 Selection of test organisms.....	14
5.3 Preservation and maintenance of test organisms.....	15
5.4 Microorganisms for performance testing.....	16
6 Quality control and performance testing of culture media	19
6.1 General requirements.....	19
6.2 Physical and chemical quality control.....	19
6.3 Microbiological quality control.....	19
6.4 General requirements for microbiological performance testing.....	20
6.5 Performance evaluation and interpretation of results.....	21
6.6 Confirmation media and reagents.....	22
7 Methods for performance testing of solid culture media	22
7.1 General.....	22
7.2 Methods for quantitative tests.....	22
7.3 Testing of culture media used for membrane filtration.....	24
7.4 Methods for qualitative tests.....	24
8 Methods for performance testing of liquid culture media	25
8.1 General.....	25
8.2 Quantitative tube method for performance testing of liquid enrichment media (dilution to extinction method).....	25
8.3 Qualitative tube method for performance testing of selective liquid media.....	26
8.4 Qualitative single tube method (turbidity) for performance testing of liquid media.....	27
9 Methods for performance testing of diluents and transport media	28
9.1 General.....	28
9.2 Method for testing diluents.....	28
9.3 Method for testing transport media.....	29
10 Documentation of test results	30
10.1 Information provided by the manufacturer.....	30
10.2 Traceability.....	30
Annex A (informative) Designation of the components of culture media in International Standards on microbiological analysis of food, animal feed and water	31

Annex B (normative) Preparation of reference stock and working culture	33
Annex C (normative) Flow charts of methods for performance testing	38
Annex D (informative) Example of card for recording test results of culture media	42
Annex E (normative) Test microorganisms and performance criteria for culture media commonly used in food microbiology	44
Annex F (normative) Test microorganisms and performance criteria for culture media commonly used in water microbiology	66
Annex G (normative) Use of control charts to monitor quantitative testing of solid culture media	78
Annex H (informative) Quality assurance of culture media — Troubleshooting	85
Annex I (informative) Quantitative testing of liquid media	87
Annex J (normative) Definition of microbiological performance tests for standardized culture media	91
Bibliography	95

Introduction

In laboratories carrying out microbiological examinations, the main objectives are to maintain, resuscitate, grow, detect and/or enumerate a wide variety of microorganisms. Culture media are used in all traditional microbiological culture techniques and also for many alternative techniques. Many formulae of culture media are commercially available and many more, designed for specific growth purposes, are described in the literature.

Many tests and procedures depend upon culture media being capable of providing consistent and reproducible results. The requirements for media may be specific to both the sample and the organisms to be detected. Culture media meeting established performance criteria are therefore a pre-requisite for any reliable microbiological work. Sufficient testing should be carried out to demonstrate

- a) the acceptability of each batch of medium,
- b) that the medium is “fit for purpose”, and
- c) that the medium can produce consistent results.

These three criteria are an essential part of internal quality control procedures and, with appropriate documentation, will permit effective monitoring of culture media and contribute to the production of both accurate and reliable data. For reliable microbiological analysis it is essential to use culture media of proven quality. For all media described in standard methods it is essential to define the minimum acceptance criteria required to ensure their reliability. It is recommended that in the determination of the performance characteristics of a culture medium tests are carried out that conform with this International Standard.

The establishment of widely accepted minimum performance criteria for media should lead to products with more consistent quality and thus reduce the extent of testing necessary in the user's laboratory.

In addition the acceptance criteria measured by the methods defined in this International Standard can be used by all microbiological laboratories to evaluate the productive, selective and/or elective properties of a culture medium.

In the microbiological analysis of food, animal feed and water, the requirements of this International Standard have precedence in the assessment of culture media quality.

Microbiology of food, animal feed and water — Preparation, production, storage and performance testing of culture media

1 Scope

This International Standard defines terms related to quality assurance of culture media and specifies the requirements for the preparation of culture media intended for the microbiological analysis of food, animal feed, and samples from the food or feed production environment as well as all kinds of water intended for consumption or used in food production.

These requirements are applicable to all categories of culture media prepared for use in laboratories performing microbiological analyses.

This International Standard also sets criteria and describes methods for the performance testing of culture media. This International Standard applies to producers such as:

- commercial bodies producing and/or distributing ready-to-use or semi-finished reconstituted or dehydrated media;
- non-commercial bodies supplying media to third parties;
- microbiological laboratories preparing culture media for their own use.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 feed — 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 feed — 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 6887-3, *Microbiology of food and animal feed — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 3: Specific rules for the preparation of fish and fishery products*

ISO 6887-4, *Microbiology of food and animal feed — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 4: Specific rules for the preparation of miscellaneous products*

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

ISO 6887-6, *Microbiology of food and animal feed — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 6: Specific rules for the preparation of samples taken at the primary production stage*

ISO 7704, *Water quality — Evaluation of membrane filters used for microbiological analyses*