

**Toiduainete ja loomasöötade mikrobioloogia.
Katseproovide, algsuspensiooni ja
kümnendlahjenduste valmistamine
mikrobioloogiliseks uuringuks. Osa 1: Üldeeskirjad
algsuspensiooni ja kümnendlahjenduste
valmistamiseks**

Microbiology of food and animal feeding stuffs -
Preparation of test samples, initial suspension and
decimal dilutions for microbiological examination - Part
1: General rules for the preparation of the initial
suspension and of decimal dilutions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 6887-1:2001 sisaldab Euroopa standardi EN ISO 6887-1:1999 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 05.09.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.02.1999.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 6887-1:2001 consists of the English text of the European standard EN ISO 6887-1:1999.

This standard is ratified with the order of Estonian Centre for Standardisation dated 05.09.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 15.02.1999.

The standard is available from Estonian standardisation organisation.

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Võtmesõnad:

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
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English version

**Microbiology of food and animal feeding stuffs – 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 6887-1 : 1999)**

Microbiologie des aliments – Préparation des échantillons, de la suspension mère et des dilutions décimales en vue de l'examen microbiologique – Partie 1: Règles générales pour la préparation de la suspension mère et des dilutions décimales (ISO 6887-1 : 1999)

Mikrobiologie von Lebensmitteln und Futtermitteln – Vorbereitung von Untersuchungsproben und Herstellung von Erstverdünnungen und von Dezimalverdünnungen für mikrobiologische Untersuchungen – Teil 1: Allgemeine Regeln für die Herstellung von Erstverdünnungen und Dezimalverdünnungen (ISO 6887-1 : 1999)

This European Standard was approved by CEN on 1999-02-15.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 6887-1 : 1999 Microbiology of food and animal feeding stuffs – 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,

which was prepared by ISO/TC 34 'Agricultural food products' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 275 'Food analysis', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by August 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 6887-1 : 1999 was approved by CEN as a European Standard without any modification.

Introduction

Because of the large variety of food and feed products, this horizontal method may not be appropriate in every detail for certain products. In this case, different methods, which are specific to these products may be used if absolutely necessary for justified technical reasons. Nevertheless, every attempt should be made to apply this horizontal method as far as possible.

When this part of ISO 6887 is next reviewed, account will be taken of all information then available regarding the extent to which this horizontal method has been followed and the reasons for deviations from this method in the case of particular products.

The harmonization of test methods cannot be immediate, and for certain group of products International Standards and/or national standards may already exist that do not comply with this horizontal method. It is hoped that when such standards are reviewed they will be changed to comply with this part of ISO 6887 so that eventually the only remaining departures from this horizontal method will be those necessary for well-established technical reasons.

This part of ISO 6887 defines the general rules for the preparation of the initial suspension and of decimal dilutions for microbiological examination. Part 2 of ISO 6887 (under preparation) will specify specific rules for the preparation of the test sample and of the initial suspension, taking into account the variety of food and feed products to which ISO 6887 applies.

For a number of products, it is necessary to take special precautions especially when preparing the initial suspension, because of the physical state of the product (such as a dry product, a highly viscous product), or the presence of inhibitory substances (such as spices, salted fishes), or the acidity, etc.

It is recommended that, whilst waiting for the publication of part 2, any special diluents or practices specified for particular products in an appropriate specific standard be used in the preparation of the initial suspension. This may include:

- adjustment of the pH of a food suspension to neutrality;
- the use of buffered peptone water, and no other diluent, for products with high inhibitory effect, or products containing microorganisms that have been stressed (e.g. acidic pH);
- specific rehydration procedures for foods of low water activity to minimize osmotic shock;
- the use of adequate temperatures to aid suspension of cocoa, gelatine, milk powder, etc.;
- resuscitation procedures for the improved recovery of stressed microorganisms resulting from food processing and storage;
- homogenization procedures and duration specific to certain products (e.g. cereals) and/or to certain determinations (e.g. yeasts and moulds);
- the use of surface-active agents for high-fat foods.

1 Scope

This part of ISO 6887 defines general rules for the aerobic preparation of the initial suspension and of decimal dilutions for microbiological examinations of products intended for human or animal consumption.

This part of ISO 6887 is applicable to the general case, except for products mentioned in ISO 6887-2.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 6887. For dated references, subsequent amendments to, or revisions of, this publication do not apply. However, parties to agreements based on this part of ISO 6887 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 7218, *Microbiology of food and animal feeding stuffs — General rules for microbiological examinations*.

3 Definitions

For the purposes of this part of ISO 6887, the following definitions apply.

3.1

initial suspension (primary dilution)

suspension, solution or emulsion obtained after a weighed or measured quantity of the product under examination (or of a test sample prepared from the product) has been mixed with a nine-fold quantity of diluent, allowing large particles, if present, to settle

NOTE See clause 5 and notes 1 and 2 of 9.1.

3.2

further decimal dilutions

suspensions or solutions obtained by mixing a measured volume of the initial suspension (3.1) with a ninefold volume of diluent and by repeating this operation with further dilutions until a decimal dilution series, suitable for the inoculation of culture media, is obtained