Cosmetics - Microbiology - Enumeration and detection of aerobic mesophilic bacteria



FESTI STANDARDI FESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 21149:2009 sisaldab Euroopa standardi EN ISO 21149:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.11.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.06.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 21149:2009 consists of the English text of the European standard EN ISO 21149:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2009 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 17.06.2009.

The standard is available from Estonian standardisation organisation.

ICS 07.100.99, 71.100.70

Standardite reprodutseerimis- ja levitamisõigus 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: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

EUROPEAN STANDARD

EN ISO 21149

NORME EUROPÉENNE EUROPÄISCHE NORM

June 2009

ICS 07.100.99: 71.100.70

English Version

Cosmetics - Microbiology - Enumeration and detection of aerobic mesophilic bacteria (ISO 21149:2006)

Cosmétiques - Microbiologie - Dénombrement et détection des bactéries aérobies mésophiles (ISO 21149:2006)

Kosmetik - Mikrobiologie - Zählung und Nachweis von aeroben mesophilen Bakterien (ISO 21149:2006)

This European Standard was approved by CEN on 23 May 2009.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of ISO 21149:2006 has been prepared by Technical Committee ISO/TC 217 "Cosmetics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 21149:2009 by Technical Committee CEN/SS H99 "Products for household and leisure use - Undetermined" the secretariat of which is held by CMC.

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 December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 21149:2006 has been approved by CEN as a EN ISO 21149:2009 without any modification.

Contents

Page

Forew	ord	įν
1	Scope	. 1
2	Normative references	. 1
3	Terms and definitions	. 1
4 4.1 4.2 4.3 4.4	Principle	. 2 . 2 . 3
5 5.1 5.2 5.3 5.4	Diluents, neutralizers and culture media	. 3 . 3 . 4
6	Apparatus and glassware	
7	Strains of microorganisms	. 7
8	Handling of cosmetic products and laboratory samples	. 7
9 9.1 9.2 9.3 9.4	Procedure General recommendation Preparation of the initial suspension Counting methods Enrichment	. 7 . 7 . 8
10	Counting of colonies (plate counts and membrane filtration methods)	
11	Detection of growth (enrichment method)	
12 12.1 12.2 12.3 12.4	Expression of results Method of calculation for plate count Interpretation Examples Detection after enrichment	10 10 11
13 13.1 13.2 13.3 13.4 13.5	Neutralization of the antimicrobial properties of the product	13 14 14 15
14	Test report	16
Annex	A (informative) Other neutralizing diluents	17
	B (informative) Other diluents	
	C (informative) Other culture media	
Annex	D (informative) Neutralizers of antimicrobial activity of preservatives and rinsing liquids	23
Riblio	granhy	24

Cosmetics — Microbiology — Enumeration and detection of aerobic mesophilic bacteria

1 Scope

This International Standard gives general guidelines for enumeration and detection of mesophilic aerobic bacteria present in cosmetics,

- by counting the colonies on agar medium after aerobic incubation, or
- by checking the absence of bacterial growth after enrichment.

Because of the large variety of cosmetic products within this field of application, this method may not be appropriate for some products in every detail (e.g. certain water immiscible products). Other methods (e.g. automated) may be substituted for the tests presented here provided that their equivalence has been demonstrated or the method has been otherwise validated.

If needed, microorganisms enumerated or detected may be identified using suitable identification tests described in the standards given in the Bibliography.

In order to ensure product quality and safety for consumers, it is advisable to perform an appropriate microbiological risk analysis, so as to determine the types of cosmetic products to which this International Standard is applicable. Products considered to present a low microbiological risk include those with low water activity, hydro-alcoholic products, extreme pH values, etc.

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 21148:2005, Cosmetics — Microbiology — General instructions for microbiological examination

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

aerobic mesophilic bacteria

mesophilic bacteria growing aerobically under the conditions specified in this International Standard

NOTE In the described conditions, other types of microorganisms (e.g. yeast, mould) can be detected.

3.2

product

portion of an identified cosmetic product received in the laboratory for testing

© ISO 2006 – All rights reserved