

This is a preview of "ISO 18415:2007". [Click here to purchase the full version from the ANSI store.](#)

First edition
2007-09-01

Corrected version
2007-12-01

Cosmetics — Microbiology — Detection of specified and non-specified microorganisms

*Cosmétiques — Microbiologie — Détection des micro-organismes
spécifiés et non spécifiés*



Reference number
ISO 18415:2007(E)

© ISO 2007

This is a preview of "ISO 18415:2007". [Click here to purchase the full version from the ANSI store.](#)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 18415:2007". [Click here to purchase the full version from the ANSI store.](#)

Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	2
4 Principle.....	3
5 Diluents and culture media.....	3
5.1 General.....	3
5.2 Diluent for the microbial suspension (tryptone sodium chloride solution)	3
5.3 Culture media	4
6 Apparatus and glassware	5
7 Strains of microorganism	5
8 Handling of cosmetic products and laboratory samples	6
9 Procedure	6
9.1 General recommendations	6
9.2 Preparation of the initial suspension in the enrichment broth	6
9.3 Incubation of the initial suspension	7
9.4 Isolation of specified and non-specified microorganisms	7
9.5 Procedure for identification of the specified microorganism: <i>Pseudomonas aeruginosa</i>	7
9.6 Procedure for identification of the specified microorganism: <i>Escherichia coli</i>	8
9.7 Procedure for identification of the specified microorganism: <i>Staphylococcus aureus</i>	8
9.8 Procedure for the identification of the specified microorganism: <i>Candida albicans</i>	9
9.9 Procedure for the identification of non-specified microorganisms	9
10 Expression of the results	10
10.1 Detection of specified microorganisms	10
10.2 Detection of non-specified microorganisms	10
10.3 Absence of microorganisms	10
11 Neutralization of the antimicrobial properties of the product.....	10
11.1 General.....	10
11.2 Preparation of inoculum	10
11.3 Validation of detection method by enrichment	11
12 Test report	12
Annex A (informative) General scheme for identification of microorganisms	13
Annex B (informative) Other Media	14
Annex C (informative) Neutralizers of antimicrobial activity of preservatives and rinsing liquids	17
Bibliography	18

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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 18415 was prepared by Technical Committee ISO/TC 217, *Cosmetics*.

This corrected version of ISO 18415:2007 contains the following corrections:

- p. 2, 3.6.1: modification of definition;
- p. 3, 3.8: correction of term's number;
- p.8, 9.7.1: correction of text in the second paragraph.

This is a preview of "ISO 18415:2007". [Click here to purchase the full version from the ANSI store.](#)

Introduction

Microbiological examinations of cosmetic products are carried out according to an appropriate microbiological risk analysis in order to ensure their quality and safety for consumers.

Microbiological risk analysis depends on several parameters such as:

- potential alteration of cosmetic products;
- pathogenicity of microorganisms;
- site of application of the cosmetic product (hair, skin, eyes, mucous membranes);
- type of user (adults, children, including under 3 years).

For cosmetics and other topical products, the detection of skin pathogens such as *Staphylococcus aureus*, *Pseudomonas aeruginosa* and *Candida albicans* may be relevant because they can cause skin or eye infection. The detection of other kinds of microorganisms might be of interest since these microorganisms (including indicators of faecal contamination e.g. *Escherichia coli*) suggest hygienic failure during manufacturing process.