SS ISO 11930:2023

ISO 11930:2019+AMD1:2022, IDT

(ICS 07.100.40)

SINGAPORE STANDARD

Cosmetics — Microbiology — Evaluation of the antimicrobial protection of a cosmetic product

Singapore Standards Council

SS ISO 11930:2023
ISO 11930:2019+AMD1:2022, IDT
(ICS 07.100.40)

SINGAPORE STANDARD

Cosmetics — Microbiology — Evaluation of the antimicrobial protection of a cosmetic product

Published by Enterprise Singapore

ISBN 978-981-5163-41-4

National Foreword

This Singapore Standard was prepared by the Working Group on Cosmetics set up by the Technical Committee on Biotechnology and Laboratory Testing under the purview of the Biomedical and Health Standards Committee.

This standard is a revision of SS ISO 11930:2017. It is an identical adoption of ISO 11930:2019, "Cosmetics — Microbiology — Evaluation of the antimicrobial protection of a cosmetic product", including the amendments to this edition, published by the International Organization for Standardization.

NOTE 1 – Where appropriate, the words "International Standard" are read as "Singapore Standard".

NOTE 2 – Where numerical values are expressed as decimals, the comma is read as a full point.

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

INTERNATIONAL STANDARD

ISO 11930

Second edition
2019-01

Cosmetics — Microbiology — Evaluation of the antimicrobial protection of a cosmetic product

Cosmétiques — Microbiologie — Évaluation de la protection antimicrobienne d'un produit cosmétique

Reference number
ISO 11930:2019(E)

COPYRIGHT PROTECTED DOCUMENT

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

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

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.

This second edition cancels and replaces the first edition (ISO 11930:2012), which has been technically revised. The main changes compared to the previous edition are as follows.

— Two types of diluents, composition 1 and composition 2 can be used as the diluents for bacteria and *Candida albicans* on the revised version (5.2.3).

— 5.6.2 Paragraph 2 has been changed to "When counts of surviving microorganisms obtained in 5.6.1.4 c) are less than 30 for bacteria and *C. albicans* or less than 15 for *A. brasiliensis* at the dilution where neutralization has been checked, record the number of colonies on Petri dishes and express results by multiplying by the dilution factor. If no colonies are observed at the dilution where neutralization has been checked, note the result as <1 and multiply by the dilution factor."

Introduction

This document is designed to be used in the overall evaluation of the antimicrobial protection of a cosmetic product.

The antimicrobial protection of a product can come from many sources:

— chemical preservation;

— inherent characteristics of the formulation;

— package design;

— manufacturing process.

This document defines a series of steps to be taken when assessing the overall antimicrobial protection of a cosmetic product. A reference method for a preservation efficacy test (challenge test) along with evaluation criteria is also described in this document.

The test described in this document involves, for each test microorganism, placing the formulation in contact with a calibrated inoculum, and then measuring the changes in the microorganism count at set time intervals for a set period and at a set temperature.

The data generated by the risk assessment (see ISO 29621) or by the preservation efficacy test, or both, are used to establish the level of antimicrobial protection required to minimize user risk.

INTERNATIONAL STANDARD **ISO 11930:2019(E)**

Cosmetics — Microbiology — Evaluation of the antimicrobial protection of a cosmetic product

1 Scope

This document specifies a procedure for the interpretation of data generated by the preservation efficacy test or by the microbiological risk assessment, or both, when evaluating the overall antimicrobial protection of a cosmetic product.

It comprises:

— a preservation efficacy test;

— a procedure for evaluating the overall antimicrobial protection of a cosmetic product that is not considered low risk, based on a risk assessment described in ISO 29621.

The preservation efficacy test is a reference method to evaluate the preservation of a cosmetic formulation. It is applicable to cosmetic products in the marketplace.

This test does not apply to those cosmetic products for which the microbiological risk has been determined to be low according to Annex A and ISO 29621.

This test is primarily designed for water-soluble or water-miscible cosmetic products and can be used with modification to test products in which water is the internal (discontinuous) phase.

NOTE This test can be used as a guideline to establish a development method during the development cycle of cosmetic products. In this case, the test can be modified or extended, or both, for example, to make allowance for prior data and different variables (microbial strains, media, incubation conditions exposure time, etc.). Compliance criteria can be adapted to specific objectives. During the development stage of cosmetic products, other methods, where relevant, can be used to determine the preservation efficacy of formulations.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 16212, *Cosmetics — Microbiology — Enumeration of yeast and mould*

ISO 18415, *Cosmetics — Microbiology — Detection of specified and non-specified microorganisms*

ISO 21148:2017, *Cosmetics — Microbiology — General instructions for microbiological examination*

ISO 21149, *Cosmetics — Microbiology — Enumeration and detection of aerobic mesophilic bacteria*

ISO 29621, *Cosmetics — Microbiology — Guidelines for the risk assessment and identification of microbiologically low-risk products*