



# SLOVENSKI STANDARD SIST EN ISO 4973:2023

01-december-2023

---

**Kozmetika - Mikrobiologija - Kontrola kakovosti gojišč in razredčil, ki se uporabljajo v standardih za kozmetiko (ISO 4973:2023)**

Cosmetics - Microbiology - Quality control of culture media and diluents used in cosmetics standards (ISO 4973:2023)

Kosmetische Mittel - Mikrobiologie - Qualitätskontrolle von Nährmedien und Verdünnungsmitteln, die in den Normen für kosmetischen Mittel verwendet werden (ISO 4973:2023)

Cosmétiques - Microbiologie - Contrôle qualité des milieux de culture et des diluants utilisés dans les normes relatives aux cosmétiques (ISO 4973:2023)

**Ta slovenski standard je istoveten z: EN ISO 4973:2023**

<https://standards.iteh.ai/catalog/standards/sist/e3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023>

---

**ICS:**

07.100.40      Kozmetika - mikrobiologija      Cosmetics microbiology

**SIST EN ISO 4973:2023**

**en,fr,de**



EUROPEAN STANDARD

EN ISO 4973

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2023

ICS 07.100.40

English Version

## Cosmetics - Microbiology - Quality control of culture media and diluents used in cosmetics standards (ISO 4973:2023)

Cosmétiques - Microbiologie - Contrôle qualité des milieux de culture et des diluants utilisés dans les normes relatives aux cosmétiques (ISO 4973:2023)

Kosmetische Mittel - Mikrobiologie - Qualitätskontrolle von Nährmedien und Verdünnungsmitteln, die in den Normen für kosmetischen Mittel verwendet werden (ISO 4973:2023)

This European Standard was approved by CEN on 26 September 2023.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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

[SIST EN ISO 4973:2023](https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023)

<https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023>



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3

**iTeh Standards**  
**(<https://standards.iteh.ai>)**  
**Document Preview**

[SIST EN ISO 4973:2023](https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023)

<https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023>

## European foreword

This document (EN ISO 4973:2023) has been prepared by Technical Committee ISO/TC 217 "Cosmetics" in collaboration with Technical Committee CEN/TC 392 "Cosmetics" the secretariat of which is held by AFNOR.

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 April 2024, and conflicting national standards shall be withdrawn at the latest by April 2024.

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

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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

## Endorsement notice

The text of ISO 4973:2023 has been approved by CEN as EN ISO 4973:2023 without any modification.

[SIST EN ISO 4973:2023](https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023)

<https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023>



# INTERNATIONAL STANDARD

# ISO 4973

First edition  
2023-09

---

---

## Cosmetics — Microbiology — Quality control of culture media and diluents used in cosmetics standards

*Cosmétiques — Microbiologie — Contrôle qualité des milieux  
de culture et des diluants utilisés dans les normes relatives aux  
cosmétiques*

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

[SIST EN ISO 4973:2023](https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023)

<https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023>



Reference number  
ISO 4973:2023(E)

© ISO 2023

ISO 4973:2023(E)

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

[SIST EN ISO 4973:2023](https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023)

<https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

Page

<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>3</b>
4.1 General information.....	3
4.2 pH.....	3
4.3 Absence of microbiological growth.....	3
4.4 Growth promotion.....	3
4.5 Selective and indicative properties.....	3
<b>5 Diluents, neutralizers and culture media</b> .....	<b>4</b>
5.1 General.....	4
5.2 Diluents and neutralizers.....	4
5.3 Culture media.....	4
<b>6 Apparatus and glassware</b> .....	<b>4</b>
<b>7 Strains of microorganisms</b> .....	<b>4</b>
<b>8 Procedure</b> .....	<b>6</b>
8.1 General recommendation.....	6
8.2 Preparation of strains.....	6
8.2.1 General.....	6
8.2.2 Preparation of bacterial and <i>Candida albicans</i> suspensions.....	9
8.2.3 Preparation of <i>Aspergillus brasiliensis</i> spore stock suspension.....	9
8.2.4 Control of the concentration of the calibrated suspension.....	10
8.3 Absence of microbial growth.....	10
8.3.1 Solid culture media.....	10
8.3.2 Liquid culture media and diluents.....	10
8.4 Growth promotion.....	10
8.4.1 Solid culture media.....	10
8.4.2 Liquid culture media.....	11
8.5 Selective properties.....	11
8.5.1 Solid culture media — For indicative properties.....	11
8.5.2 Solid culture media — For inhibition properties.....	11
<b>9 Expression of results</b> .....	<b>11</b>
9.1 Absence of microbial growth.....	11
9.1.1 Solid culture media.....	11
9.1.2 Liquid culture media.....	11
9.2 Growth promotion.....	11
9.2.1 Solid culture media.....	11
9.2.2 Liquid culture media.....	11
9.3 Selective and indicative properties.....	12
9.3.1 Solid culture media — For indicative properties.....	12
9.3.2 Solid culture media — For inhibition properties.....	12
<b>10 Interpretation and acceptance criteria</b> .....	<b>12</b>
10.1 General.....	12
10.2 Absence of microbial growth.....	12
10.3 Growth promotion.....	12
10.3.1 Solid culture media.....	12
10.3.2 Growth promotion — Liquid media culture.....	13
10.4 Selective properties of solid culture media.....	13

**ISO 4973:2023(E)**

10.4.1 For indicative properties .....	13
10.4.2 For inhibition properties.....	13
<b>Annex A (normative) Specifications for growth promoting, inhibitory and indicative properties of culture media.....</b>	<b>14</b>
<b>Annex B (informative) Quality control report for culture media.....</b>	<b>19</b>
<b>Bibliography.....</b>	<b>21</b>

**iTeh Standards**  
**(<https://standards.iteh.ai>)**  
**Document Preview**

[SIST EN ISO 4973:2023](https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023)

<https://standards.iteh.ai/catalog/standards/sist/c3574838-b987-4619-aadd-252a7817121c/sist-en-iso-4973-2023>

## 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 document 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](http://www.iso.org/directives)).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at [www.iso.org/patents](http://www.iso.org/patents). ISO shall not be held responsible for identifying any or all such patent rights.

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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 217, *Cosmetics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 392, *Cosmetics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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](http://www.iso.org/members.html).