
**Cosmetics — Microbiology —
Enumeration and detection of aerobic
mesophilic bacteria**

*Cosmétiques — Microbiologie — Dénombrement et détection des
bactéries aérobies mésophiles*



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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.

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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.

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ISO 21149 was prepared by Technical Committee ISO/TC 217, *Cosmetics*.

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