

ISO 11930:2019 (E)

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

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Preservation efficacy test
5.1	General
5.2	Materials, apparatus, reagents and culture media
5.2.1	General
5.2.2	Materials
5.2.3	Diluents
5.2.3.1	General
5.2.3.2	Diluents for bacteria and <i>Candida albicans</i>
5.2.3.2.1	Composition 1
5.2.3.2.2	Preparation
5.2.3.2.3	Composition 2
5.2.3.2.4	Preparation
5.2.3.3	Diluent for preparation of <i>Aspergillus brasiliensis</i> : polysorbate solution
5.2.4	Neutralizer
5.2.4.1	General
5.2.4.2	Eugon LT 100 liquid broth
5.2.4.2.1	General
5.2.4.2.2	Composition
5.2.4.2.3	Preparation
5.2.5	Culture media
5.2.5.1	General
5.2.5.2	Culture medium for bacteria: tryptic soy agar (TSA) or soybean casein digest agar medium
5.2.5.2.1	Composition
5.2.5.2.2	Preparation
5.2.5.3	Culture medium for <i>C. albicans</i> : Sabouraud dextrose agar medium (SDA)
5.2.5.3.1	Composition
5.2.5.3.2	Preparation
5.2.5.4	Culture medium for <i>A. brasiliensis</i> : potato dextrose agar (PDA)
5.2.5.4.1	Composition
5.2.5.4.2	Preparation
5.3	Microbial strains
5.4	Preparation and enumeration of inocula
5.4.1	General
5.4.2	Preparation of bacterial and <i>Candida albicans</i> suspensions
5.4.3	Preparation of <i>Aspergillus brasiliensis</i> spore suspension
5.5	Demonstration of the neutralizer efficacy
5.5.1	Principle
5.5.2	Procedure
5.5.3	Calculations
5.5.4	Interpretation of results and conclusion on neutralizer efficacy

- 5.6 Determination of the preservation efficacy of the formulation
 - 5.6.1 Procedure
 - 5.6.1.1 Sampling of test product
 - 5.6.1.2 Inoculation of test microorganisms
 - 5.6.1.3 Incubation of the inoculated formulation
 - 5.6.1.4 Sampling and enumeration
 - 5.6.2 Counting of colonies
 - 5.6.3 Calculations
 - 5.6.3.1 General
 - 5.6.3.2 Determination of the initial numbers of microorganisms, N and N0
 - 5.6.3.3 Enumeration of the microorganisms at each sampling time, Nx
 - 5.6.3.4 Reduction in microbial counts
 - 5.7 Interpretation of test results and conclusions
 - 5.7.1 Criteria
 - 5.7.2 General case (efficacy of the neutralizer is demonstrated for all strains)
 - 5.7.3 Case of formulations for which the efficacy of the neutralizer is not demonstrated for some strains
 - 5.8 Test report
- 6 Overall evaluation of the antimicrobial protection of the cosmetic product
- 6.1 General
 - 6.2 Case 1 — Preservation efficacy test has been performed on the formulation
 - 6.3 Case 2 — Preservation efficacy test has not been performed on the formulation
- Annex A (normative) Decision diagram
- Annex B (normative) Evaluation criteria for the preservation efficacy test
- Annex C (informative) Examples of neutralizers for the antimicrobial activity of preservatives and washing liquids
- Annex D (informative) Packaging characteristics

Page count: 22