ISO 21150:2015-12 (E)

Cosmetics - Microbiology - Detection of Escherichia coli

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Principle 2

5 Diluents and culture media 2
5.1 General 2
5.2 Diluent for the bacterial suspension (tryptone sodium chloride solution) 3
5.2.1 General 3
5.2.2 Composition 3
5.2.3 Preparation 3
5.3 Culture media 3
5.3.1 General 3
5.3.2 Agar medium for the suitability test (see Clause 11) [soybean-casein digest agar medium (SCDA) or tryptic soy agar (TSA)] 3
5.3.3 Enrichment broth 4
5.3.4 Selective agar medium for isolation of Escherichia coli 4
5.3.5 Selective agar medium for confirmation of Escherichia coli 5

6 Apparatus and glassware 6

7 Strains of microorganisms 6

8 Handling of cosmetic products and laboratory samples 6

9 Procedure 6
9.1 General recommendation 6
9.2 Preparation of the initial suspension in the enrichment broth 6
9.2.1 General 6
9.2.2 Water-miscible products 7
9.2.3 Water-immiscible products 7
9.2.4 Filterable products 7
9.3 Incubation of the inoculated enrichment broth 7
9.4 Detection and identification of Escherichia coli 7
9.4.1 Isolation 7
9.4.2 Identification of Escherichia coli 7

10 Expression of the results (detection of Escherichia coli) 8

11 Neutralization of the antimicrobial properties of the product 8
11.1 General 8
11.2 Preparation of inoculum 8
11.3 Suitability of the detection method 8
11.3.1 Procedure 8
11.3.2 Interpretation of suitability test results 9

12 Test report 9

Annex A (informative) Other enrichment broths 10

Annex B (informative) Neutralizers of antimicrobial activity of preservatives and rinsing liquids 13

Bibliography 14