

DIN EN ISO 21150:2023-01 (E)

Cosmetics - Microbiology - Detection of Escherichia coli (ISO 21150:2015 + Amd 1:2022) (includes Amendment :2022)

| Contents | | Page |
|--|---|-------------|
| European foreword | | 4 |
| European foreword to Amendment A1" | | 5 |
| Foreword | | 6 |
| Introduction | | 7 |
| 1 | Scope | 8 |
| 2 | Normative references | 8 |
| 3 | Terms and definitions | 8 |
| 4 | Principle | 9 |
| 5 | Diluents and culture media | 9 |
| 5.1 | General | 9 |
| 5.2 | Diluent for the bacterial suspension (tryptone sodium chloride solution) | 10 |
| 5.2.1 | General | 10 |
| 5.2.2 | Composition | 10 |
| 5.2.3 | Preparation | 10 |
| 5.3 | Culture media | 10 |
| 5.3.1 | General | 10 |
| 5.3.2 | Agar medium for the suitability test (see Clause 11) [soybean-casein digest agar medium (SCDA) or tryptic soy agar (TSA)] | 10 |
| 5.3.3 | Enrichment broth | 11 |
| 5.3.4 | Selective agar medium for isolation of Escherichia coli | 12 |
| 5.3.5 | Selective agar medium for confirmation of Escherichia coli | 13 |
| 6 | Apparatus and glassware | 13 |
| 7 | Strains of microorganisms | 14 |
| 8 | Handling of cosmetic products and laboratory samples | 14 |
| 9 | Procedure | 14 |
| 9.1 | General recommendation | 14 |
| 9.2 | Preparation of the initial suspension in the enrichment broth | 14 |
| 9.2.1 | General | 14 |
| 9.2.2 | Water-miscible products | 15 |
| 9.2.3 | Water-immiscible products | 15 |
| 9.2.4 | Filterable products | 15 |
| 9.3 | Incubation of the inoculated enrichment broth | 15 |
| 9.4 | Detection and identification of Escherichia coli | 15 |
| 9.4.1 | Isolation | 15 |
| 9.4.2 | Identification of Escherichia coli | 15 |
| 10 | Expression of the results (detection of Escherichia coli) | 16 |
| 11 | Neutralization of the antimicrobial properties of the product | 16 |

| | | |
|---|--|----|
| 11.1 | General | 16 |
| 11.2 | Preparation of inoculum | 16 |
| 11.3 | Suitability of the detection method | 16 |
| 11.3.1 | Procedure | 16 |
| 11.3.2 | Interpretation of suitability test results | 16 |
| 12 | Test report | 16 |
| Annex A (informative) Other enrichment broths | | 18 |
| Annex B (informative) Neutralizers of antimicrobial activity of preservatives and rinsing liquids | | 21 |
| Bibliography | | 22 |