

DIN EN ISO 16212:2023-01 (E)

Cosmetics - Microbiology - Enumeration of yeast and mould (ISO 16212:2017 + Amd 1:2022) (includes Amendment :2022)

Contents	Page
European foreword	3
[A1] European foreword to Amendment [A1]	4
Foreword	5
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Principles	8
4.1 General	8
4.2 Plate count	8
4.3 Membrane filtration	8
5 Diluents, neutralizers and culture media	9
5.1 General	9
5.2 Neutralizing diluents and diluents	9
5.3 Diluent for yeast suspension (tryptone sodium chloride solution)	10
5.4 Culture media	10
6 Apparatus and glassware	11
7 Strain of microorganisms	11
8 Handling of cosmetic products and laboratory samples	12
9 Procedure	12
9.1 General recommendation	12
9.2 Preparation of the initial suspension	12
9.2.1 General	12
9.2.2 Water-miscible products	12
9.2.3 Water-immiscible products	12
9.3 Counting methods	12
9.3.1 Dilutions for counting methods	12
9.3.2 Plate-count methods	13
10 Counting of colonies (plate counts and membrane filtration methods)	13
11 Expression of results	14
11.1 Method of calculation for plate count	14
11.2 Interpretation	15
12 Neutralization of the antifungal properties of the product	16
12.1 General	16
12.2 Preparation of inoculum	17
12.3 Suitability of counting methods	17
12.3.1 Principle	17
12.3.2 Suitability test of the pour-plate method	17
12.3.3 Suitability of the surface spread method	17
12.3.4 Suitability of the membrane filtration method	17
13 Test report	18
Annex A (informative) Other neutralizing diluents	19
Annex B (informative) Other diluents	21
Annex C (informative) Other culture media	22
Annex D (informative) Neutralizers of antifungal activity of preservatives and rinsing liquids	24
Bibliography	25