

ISO 15213-2:2023-11 (E)

Microbiology of the food chain - Horizontal method for the detection and enumeration of Clostridium spp. - Part 2: Enumeration of Clostridium perfringens by colony-count technique

Contents

	Page
Foreword	iv
Introduction	vi
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Principle	3
4.1 General	3
4.2 Preparation of dilutions	3
4.3 Enumeration	3
4.4 Confirmation	3
5 Culture media and reagents	4
6 Equipment and consumables	4
7 Sampling	4
8 Preparation of test sample	5
9 Procedure	5
9.1 General	5
9.2 Test portion, initial suspension and dilutions	5
9.3 Heat treatment to select spores	5
9.4 Inoculation and incubation	6
9.5 Enumeration of typical colonies	6
9.6 Confirmation of C. perfringens	7
9.6.1 Selection of colonies for confirmation	7
9.6.2 Acid phosphatase test	7
9.6.3 Sulfite indole motility (SIM) agar test	7
9.6.4 Differentiation between human pathogenic and non-pathogenic C. perfringens strains (optional)	8
9.6.5 Interpretation	8
10 Expression of results	8
11 Validation of the method	8
11.1 Interlaboratory study	8
11.2 Performance characteristics	8
12 Test report	9
13 Quality assurance	10
Annex A (normative) Flow diagram of the procedure	11

Annex B (normative) Culture media and reagents	13
Annex C (informative) Method validation studies and performance characteristics	18
Annex D (informative) Molecular differentiation between pathogenic and non-pathogenic <i>C. perfringens</i>	21
Bibliography	43