

DIN 10115:2020-12 (E)

Fundamentals for detection and determination of microorganisms in foodstuffs with impedance-method

Contents	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions.....	4
4 Principle.....	5
4.1 General	5
4.2 Direct impedance measurement.....	5
4.3 Indirect impedance measurement	5
5 Types of measurands and their representation.....	5
5.1 Type of measurand	5
5.1.1 Overall impedance or admittance	5
5.1.2 Components of the overall impedance or admittance	5
5.2 Representation of the measurands	6
5.2.1 General	6
5.2.2 Representation of absolute values	6
6 Culture media and reagents.....	6
6.1 General	6
6.2 Culture media	7
7 Impedance measuring system	7
7.1 General	7
7.2 Incubation unit.....	7
7.3 Measuring cells	7
7.3.1 General	7
7.3.2 Direct impedance measuring cells	7
7.3.3 Indirect impedance measuring cells.....	7
7.4 Impedance measuring device.....	7
7.5 Evaluation unit with computer, printer and corresponding software.....	8
8 Procedure	8
9 Evaluation.....	8
9.1 General	8
9.2 Characteristic values of the recorded curves.....	8
9.2.1 General	8
9.2.2 Threshold value	8
9.2.3 Detection time	8
9.2.4 Other curve characteristics.....	8
9.3 Qualitative detection.....	9
9.3.1 Detection of certain microorganisms	9
9.3.2 Test for sterility and semi-quantitative determinations.....	9
9.4 Quantitative determination.....	9
9.4.1 Relationship between impedance method and reference method	9
9.4.2 Colony count	9
10 Test report.....	10
Bibliography	11