

ISO 22196:2011-08 (E)

Measurement of antibacterial activity on plastics and other non-porous surfaces

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Materials	2
4.1	Bacteria to be used for the tests	2
4.2	Reagents, culture media and solutions	3
5	Apparatus	4
6	Sterilization of apparatus and storage of stock cultures	5
6.1	Dry-heat sterilization	5
6.2	High-pressure steam sterilization	5
6.3	Preparation of glassware	5
6.4	Maintenance of stock cultures	5
7	Procedure	6
7.1	Pre-culture of bacteria	6
7.2	Preparation of test specimens	6
7.3	Preparation of test inoculum	6
7.4	Inoculation of test specimens	6
7.5	Incubation of the inoculated test specimens	8
7.6	Recovery of bacteria from test specimens	8
7.7	Determining the viable bacteria count by the pour plate culture method	8
8	Expression of results	9
8.1	Determination of the number of viable bacteria	9
8.2	Conditions for a valid test	9
8.3	Calculation of the antibacterial activity	9
8.4	Effectiveness of the antibacterial agent	10
9	Repeatability and reproducibility	10
10	Test report	10
Annex A (normative) Quality of biological materials		11
A.1	General	11
A.2	Chemical composition of 1/500 nutrient broth (1/500 NB)	11
Annex B (informative) Repeatability and reproducibility		12
B.1	Background	12
B.2	Summary	12
B.3	Experiment	12
B.4	Results and discussion	13

Bibliography	15
---------------------------	-----------