INTERNATIONAL STANDARD

ISO 9998

First edition 1991-11-01

ANSI Internat Doc Sed

Water quality — Practices for evaluating and controlling microbiological colony count media used in water quality tests

Qualité de l'eau — Techniques d'évaluation et de contrôle des milieux microbiologiques servant au comptage des colonies pour les essais d'évaluation de la qualité de l'eau



Reference number ISO 9998:1991(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75% of the member bodies casting a vote.

International Standard ISO 9998 was prepared by Technical Committee ISO/TC 147, Water quality.

Annexes A and B form an integral part of this International Standard. Annex C is for information only.

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International Organization for Standardization

Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Introduction

The development of micro-organisms upon culture media is dependent upon a number of very important factors.

- a) The proper nutrients must be available.
- b) Oxygen or other gases must be available.
- c) A certain degree of moisture is necessary.
- d) The medium must be of the proper pH reaction.
- e) Proper temperatures must be maintained.
- f) The medium must be sterile and maintained free of contamination after inoculation.
- g) Media must be able to be reproduced consistently with minimum variations.
- h) Care should be taken to avoid plates which are too crowded.

To ensure the reproducibility of microbiological results and to enable inter-laboratory comparison studies to be made, the preparation of microbiological media must be strictly regulated. Guidelines for ensuring the proper preparation of media which can be used with similar growth expectations from laboratory to laboratory are presented below.