# Water quality - Detection and enumeration of Pseudomonas aeruginosa by membrane filtration

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### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12780:2002 sisaldab Euroopa standardi EN 12780:2002 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12780:2002 consists of the English text of the European standard EN 12780:2002.

This document is endorsed on 18.10.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

This European Standard presents a method for the isolation and enumeration of Pseudomonas aeruginosa in bottled water samples by a membrane filtration technique. This method can also be applied to other types of water with a low background flora, for example pool waters and waters intended for human consumption.

### Scope:

This European Standard presents a method for the isolation and enumeration of Pseudomonas aeruginosa in bottled water samples by a membrane filtration technique. This method can also be applied to other types of water with a low background flora, for example pool waters and waters intended for human consumption.

ICS 07.100.20

**Võtmesõnad:** aerobic bacteria, bacteria count, bacteria count methods, count methods (microbiology), determination of content, membrane filtration, microbiological analysis, microorganisms, micro-organisms, quality, water, water analysis, water practice, water quality

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN 12780** 

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#### **English version**

## Water quality - Detection and enumeration of Pseudomonas aeruginosa by membrane filtration

Qualité de l'eau - Détection et dénombrement de Pseudomonas aeruginosa par filtration sur membrane Wasserbeschaffenheit - Nachweis und Zählung von Pseudomonas aeruginosa durch Membranfiltration

This European Standard was approved by CEN on 17 February 2002.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### **Foreword**

This document EN 12780:2002 has been prepared by Technical Committee CEN/TC 230, "Water analysis", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2002, and conflicting national standards shall be withdrawn at the latest by November 2002.

Annexes A and B are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. A Dietiew Oeverage of the

### Introduction

Pseudomonas aeruginosa is an opportunistic pathogen of man that is capable of growth in water at very low concentrations of nutrients. At source and during marketing, a natural mineral water or a spring water should be free from *Pseudomonas aeruginosa* in any 250 ml sample examined (Council Directives 80/777/EEC and 96/70/EC). Other bottled waters offered for sale must also be free from *Pseudomonas aeruginosa* in any 250 ml sample (Council Directive 98/83/EC). Other waters including pool waters and water for human consumption can sometimes be tested for *Pseudomonas aeruginosa* for reasons of public health when it is usual to examine 100 ml volumes.

WARNING — Persons using this standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

### 1 Scope

This European Standard specifies a method for the isolation and enumeration of *Pseudomonas aeruginosa* in bottled water samples by a membrane filtration technique. This method can also be applied to other types of water with a low background flora, for example pool waters and waters intended for human consumption.

#### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 25667-1, Water quality — Sampling — Part 1: Guidance on the design of sampling programmes (ISO 5667-1:1980).

EN 25667-2, Water quality — Sampling — Part 2: Guidance on sampling techniques (ISO 5667-2:1991).

EN ISO 3696, Water for analytical laboratory use — Specification and test methods (ISO 3696:1987).

prEN ISO 5667-3 Water quality — Sampling — Part 3: Guidance on the preservation and handling of samples (ISO 5667-3:1994).

ISO 6887-1, Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 1: General rules for the preparation of the initial suspension and decimal dilutions.

ISO 8199, Water quality — General guide to the enumeration of micro-organisms by culture.