

# SLOVENSKI STANDARD

## SIST EN ISO 9308-1:2014

01-december-2014

Nadomešča:

SIST EN ISO 9308-1:2001

SIST EN ISO 9308-1:2001/AC:2009

---

**Kakovost vode - Ugotavljanje števila Escherichia coli in koliformnih bakterij - 1. del: Metoda membranske filtracije za vode z majhnim številom spremljajočih bakterij (ISO 9308-1:2014)**

Water quality - Enumeration of Escherichia coli and coliform bacteria - Part 1: Membrane filtration method for waters with low bacterial background flora (ISO 9308-1:2014)

Wasserbeschaffenheit - Zählung von Escherichia coli und coliformen - Teil 1: Membranfiltrationsverfahren für Wässer mit niedriger Begleitflora (ISO 9308-1:2014)

Qualité de l'eau - Dénombrement des Escherichia coli et des bactéries coliformes - Partie 1: Méthode par filtration sur membrane dans des eaux contenant peu de flore bactérienne de fond (ISO 9308-1:2014)

**Ta slovenski standard je istoveten z: EN ISO 9308-1:2014**

---

**ICS:**

07.100.20	Mikrobiologija vode	Microbiology of water
13.060.70	Preiskava bioloških lastnosti vode	Examination of biological properties of water

**SIST EN ISO 9308-1:2014**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 9308-1:2014](https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014)

<https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014>

EUROPEAN STANDARD

EN ISO 9308-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2014

ICS 07.100.20

Supersedes EN ISO 9308-1:2000

English Version

## Water quality - Enumeration of Escherichia coli and coliform bacteria - Part 1: Membrane filtration method for waters with low bacterial background flora (ISO 9308-1:2014)

Qualité de l'eau - Dénombrement des Escherichia coli et des bactéries coliformes - Partie 1: Méthode par filtration sur membrane pour les eaux à faible teneur en bactéries (ISO 9308-1:2014)

Wasserbeschaffenheit - Zählung von Escherichia coli und coliformen Bakterien - Teil 1: Membranfiltrationsverfahren für Wasser mit niedriger Begleitflora (ISO 9308-1:2014)

This European Standard was approved by CEN on 24 August 2014.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

[SIST EN ISO 9308-1:2014](https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014)

<https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014>

## Foreword

This document (EN ISO 9308-1:2014) has been prepared by Technical Committee ISO/TC 147 "Water quality" in collaboration with 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 March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 9308-1:2000.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**  
**Endorsement notice**

The text of ISO 9308-1:2014 has been approved by CEN as EN ISO 9308-1:2014 without any modification.

[SIST EN ISO 9308-1:2014](https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014)  
<https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 9308-1:2014](#)

<https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014>

INTERNATIONAL  
STANDARD

ISO  
9308-1

Third edition  
2014-09-15

---

---

**Water quality — Enumeration  
of *Escherichia coli* and coliform  
bacteria —**

**Part 1:  
Membrane filtration method for  
waters with low bacterial background  
flora**

**(standards.iteh.ai)**

*Qualité de l'eau — Dénombrement des *Escherichia coli* et des  
bactéries coliformes*

<https://standards.iteh.ai/catalog/standards/sist/952f3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014>

**Partie 1: Méthode par filtration sur membrane pour les eaux à faible  
teneur en bactéries**



Reference number  
ISO 9308-1:2014(E)

© ISO 2014

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 9308-1:2014](https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014)

<https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

	Page
Foreword.....	iv
Introduction.....	v
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>2</b>
<b>5 Apparatus and glassware</b> .....	<b>2</b>
<b>6 Culture media and reagents</b> .....	<b>2</b>
<b>7 Sampling</b> .....	<b>3</b>
<b>8 Procedure</b> .....	<b>3</b>
8.1 Preparation of the sample.....	3
8.2 Filtration.....	3
8.3 Incubation and differentiation.....	3
<b>9 Expression of results</b> .....	<b>4</b>
<b>10 Test report</b> .....	<b>4</b>
<b>11 Quality assurance</b> .....	<b>4</b>
11.1 General.....	4
11.2 Performance testing of Chromogenic Coliform Agar (CCA).....	4
11.3 Performance testing of oxidase test.....	5
<b>Annex A (informative) Further microbiological information on coliform bacteria</b> .....	<b>6</b>
<b>Annex B (normative) Composition and preparation of culture media and reagents</b> .....	<b>7</b>
<b>Annex C (informative) Performance characteristics</b> .....	<b>9</b>
<b>Bibliography</b> .....	<b>10</b>

## ISO 9308-1:2014(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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 147, *Water quality*, Subcommittee SC 4, *Microbiological methods*.

This third edition cancels and replaces the second edition (ISO 9308-1:2000), which has been technically revised.

It also incorporates the Corrigendum ISO 9308-1:2000/Cor.1:2007.

ISO 9308 consists of the following parts, under the general title *Water quality — Enumeration of Escherichia coli and coliform bacteria*:

- *Part 1: Membrane filtration method for waters with low bacterial background flora*
- *Part 2: Most probable number method*
- *Part 3: Miniaturized method (Most Probable Number) for the detection and enumeration of E. coli in surface and waste water*

## Introduction

The presence and extent of faecal pollution is an important factor in assessing the quality of water and the risk to human health from infection. Examination of water samples for the presence of *Escherichia coli* (*E. coli*), which normally inhabits the bowel of man and other warm-blooded animals, provides an indication of such pollution. Examination for coliform bacteria can be more difficult to interpret because some coliform bacteria live in soil and surface fresh water and are not always intestinal. Therefore, the presence of coliform bacteria, although not a proof of faecal contamination, may indicate failure in treatment, storage, or distribution.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 9308-1:2014](https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014)

<https://standards.iteh.ai/catalog/standards/sist/952fb3ca-5654-409b-9570-a21344053131/sist-en-iso-9308-1-2014>