

SLOVENSKI STANDARD SIST EN ISO 10705-2:2001

01-december-2001

BUXca Yý U. SIST ISO 10705-2:2000

Kakovost vode - Ugotavljanje prisotnosti in števila bakteriofagov - 2. del - Ugotavljanje števila somatskih kolifagov (ISO 10705-2:2000)

Water quality - Detection and enumeration of bacteriophages - Part 2: Enumeration of somatic coliphages (ISO 10705-2:2000)

Wasserbeschaffenheit - Nachweis und Zählung von Bakteriophagen - Teil 2: Zählung von somatischen Coliphagen (ISO 10705-2:2000)

Qualité de l'eau - Détection et dénombrement des bactériophages - Partie 2: Dénombrement des coliphages somatiques (ISO 10705-2:2000) 6-9beff5c7111703b5/sist-en-iso-10705-2-2001

Ta slovenski standard je istoveten z: EN ISO 10705-2:2001

ICS:

07.100.20 Mikrobiologija vode Microbiology of water

SIST EN ISO 10705-2:2001 en

SIST EN ISO 10705-2:2001

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 10705-2:2001</u> https://standards.iteh.ai/catalog/standards/sist/ef1 a43 f0-8bd9-4ee6-9beff5c7111703b5/sist-en-iso-10705-2-2001 EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN ISO 10705-2**

August 2001

ICS 07.100.20

English version

Water quality - Detection and enumeration of bacteriophages -Part 2: Enumeration of somatic coliphages (ISO 10705-2:2000)

Qualité de l'eau - Détection et dénombrement des bactériophages - Partie 2: Dénombrement des coliphages somatiques (ISO 10705-2:2000) Wasserbeschaffenheit - Nachweis und Zählung von Bakteriophagen - Teil 2: Zählung von somatischen Coliphagen (ISO 10705-2:2000)

This European Standard was approved by CEN on 22 June 2001.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

SIST EN ISO 10705-2:2001 https://standards.iteh.ai/catalog/standards/sist/efl a43f0-8bd9-4ee6-9bef-f5c7111703b5/sist-en-iso-10705-2-2001



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 10705-2:2001 (E)

CORRECTED 2001-11-07

Foreword

The text of the International Standard from Technical Committee ISO/TC 147 "Water quality" of the International Organization for Standardization (ISO) has been taken over as an European Standard 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 February 2002, and conflicting national standards shall be withdrawn at the latest by February 2002.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Teh ST Ændorsement notice EVIEW

The text of the International Standard ISO 10705-2:2000 has been approved by CEN as a European Standard without any modifications.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

f5c7111703b5/sist-en-iso-10705-2-2001

EN ISO 10705-2:2001 (E)

Annex ZA (normative) Normative references to international publications with their relevant European publications

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).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 3696	1987	Water for analytical laboratory use - Specification and test methods	EN ISO 3696	1995
ISO 5667-1	1980 iTe	Water quality — Sampling — Part 1: Guidance on the design of sampling programmes DARD PREVIE	EN 25667-1	1993
ISO 5667-2	1991	Water quality — Sampling — Part 2: Guidance on sampling techniques	EN 25667-2	1993
ISO 5667-3	1994 https://star	Water duality ISCS ampling 2001 Part 3: dGuidance at one strheard preservation 8t and tee6-handling of samples n-iso-10705-2-2001		1995

SIST EN ISO 10705-2:2001

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 10705-2:2001</u> https://standards.iteh.ai/catalog/standards/sist/ef1 a43 f0-8bd9-4ee6-9beff5c7111703b5/sist-en-iso-10705-2-2001

INTERNATIONAL STANDARD

ISO 10705-2

First edition 2000-04-01

Water quality — Detection and enumeration of bacteriophages —

Part 2: **Enumeration of somatic coliphages**

iTeh SQualité de l'eau — Détection et dénombrement des bactériophages —
Partie 2: Dénombrement des coliphages somatiques
(standards.iteh.ai)

<u>SIST EN ISO 10705-2:2001</u> https://standards.iteh.ai/catalog/standards/sist/efl a43f0-8bd9-4ee6-9beff5c7111703b5/sist-en-iso-10705-2-2001



ISO 10705-2:2000(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 10705-2:2001</u> https://standards.iteh.ai/catalog/standards/sist/efl a43f0-8bd9-4ee6-9beff5c7111703b5/sist-en-iso-10705-2-2001

© ISO 2000

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents Page 1 Scope1 2 3 Terms and definitions1 Safety precautions......2 4 5 Principle......2 Diluent, culture media and reagents......2 6 6.1 Basic materials......2 6.2 Diluent ______2 7 Microbiological reference cultures4 8 9 Sampling......4 10 Preparation of test material5 Culturing and maintenance of host strains5 10.1 Calibration of absorbance measurements for counts of viable microorganisms6 10.2 Procedure 6 11 Preparation of inoculum cultures and ard saltenal. 11.1 Standard procedure......7 11.2 11.3 11.4 Samples with low phage counts 1000 phage counts 11.5 11.6 Quality assurance8 12 Expression of results9 12.1 Plaque count procedures (11.2 to 11.4).....9 Presence/absence test (11.5).....9 12.2 13 Annex A (normative) Culture media, reagents and diluent......11 Annex B (informative) General description of somatic bacteriophages14

ISO 10705-2:2000(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this part of ISO 10705 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 10705-2 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 4, *Microbiological methods*.

ISO 10705 consists of the following parts, under the general title *Water quality* — *Detection and enumeration of bacteriophages*:

f5c7111703b5/sist-en-iso-10705-2-2001

- (standards.iteh.ai)

 Part 1: Enumeration of F-specific RNA bacteriophages
- Part 2: Enumeration of somatic coliphages:
 https://standards.iteh.a/catalog/standards/sist/efl a43f0-8bd9-4ee6-9bef-
- Part 3: Concentration methods
- Part 4: Enumeration of bacteriophages infecting Bacteroides fragilis

Annex A forms a normative part of this part of ISO 10705. Annexes B and C are for information only.

Water quality — Detection and enumeration of bacteriophages —

Part 2:

Enumeration of somatic coliphages

1 Scope

This part of ISO 10705 specifies a method for the detection and enumeration of somatic coliphages by incubating the sample with an appropriate host strain. The method is applicable to all kinds of water, sediments and sludge extracts, where necessary after dilution. The method is also applicable to shellfish extracts.

In the case of low phage numbers, a preconcentration step may be necessary for which a separate International Standard will be developed.

NOTE It is desirable for International Standards to be adopted as widely as possible. This part of ISO 10705 includes reference to alternative procedures which obviate the need for expensive materials or equipment which may not be readily available in developing countries. Use of these alternatives will not affect the performance of this method.

iTeh STANDARD PREVIEW

2 Normative references (standards.iteh.ai)

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 10705. For dated references, subsequent amendments to or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 10705 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 31-0:1992, Quantities and units — Part 0: General principles.

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

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

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

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

ISO 6887:1983, Microbiology — General guidance for the preparation of dilutions for microbiological examination.

ISO 8199:1988, Water quality — General guide to the enumeration of micro-organisms by culture.

ISO/IEC Guide 2, Standardization and related activities — General vocabulary.

3 Terms and definitions

For the purposes of this part of ISO 10705, the terms and definitions given in ISO/IEC Guide 2 and the following apply.

© ISO 2000 – All rights reserved