
Kakovost vode - Merjenje skupne alfa in skupne beta aktivnosti v neslanih vodah - Metoda depozicije v tankem sloju (ISO 10704:2009)

Water quality - Measurement of gross alpha and gross beta activity in non-saline water - Thin source deposit method (ISO 10704:2009)

Wasserbeschaffenheit - Bestimmung der Gesamt-Alpha- und der Gesamt-Beta-Aktivität in nicht-salzhaltigem Wasser - Dünnschichtverfahren (ISO 10704:2009)

Qualité de l'eau - Mesurage des activités alpha globale et bêta globale des eaux non salines - Méthode par dépôt d'une source fine (ISO 10704:2009)

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

Ta slovenski standard je istoveten z: EN ISO 10704:2015

ICS:

13.060.60	Preiskava fizikalnih lastnosti vode	Examination of physical properties of water
17.240	Merjenje sevanja	Radiation measurements

SIST EN ISO 10704:2015**en,de**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 10704:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

EUROPEAN STANDARD

EN ISO 10704

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2015

ICS 13.060.60; 13.280

English Version

Water quality - Measurement of gross alpha and gross beta activity in non-saline water - Thin source deposit method (ISO 10704:2009)

Qualité de l'eau - Mesurage des activités alpha globale et bêta globale des eaux non salines - Méthode par dépôt d'une source fine (ISO 10704:2009)

Wasserbeschaffenheit - Bestimmung der Gesamt-Alpha- und der Gesamt-Beta-Aktivität in nicht-salzhaltigem Wasser - Dünnschichtverfahren (ISO 10704:2009)

This European Standard was approved by CEN on 30 July 2015.

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

European foreword3

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

[SIST EN ISO 10704:2015](https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015)

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

European foreword

The text of ISO 10704:2009 has been prepared by Technical Committee ISO/TC 147 "Water quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 10704:2015 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 2016, and conflicting national standards shall be withdrawn at the latest by February 2016.

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.

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.

Endorsement notice

The text of ISO 10704:2009 has been approved by CEN as EN ISO 10704:2015 without any modification.

STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 10704:2015
<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 10704:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

INTERNATIONAL
STANDARD

ISO
10704

First edition
2009-11-15

**Water quality — Measurement of gross
alpha and gross beta activity in non-
saline water — Thin source deposit
method**

*Qualité de l'eau — Mesurage des activités alpha globale et bêta globale
des eaux non salines — Méthode par dépôt d'une source fine*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 10704:2015](https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015)

[https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-
7f1846191929/sist-en-iso-10704-2015](https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015)



Reference number
ISO 10704:2009(E)

© ISO 2009

ISO 10704:2009(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)

[SIST EN ISO 10704:2015](https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015)

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2009

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 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Symbols, definitions and units	2
4 Principle.....	3
5 Chemical reagents and equipment.....	3
6 Sampling.....	4
7 Procedure	5
8 Expression of results	8
9 Interference control.....	12
10 Test report.....	12
Bibliography.....	13

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 10704:2015](https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015)

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

ISO 10704:2009(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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10704 was prepared by Technical Committee ISO/TC 147, *Water quality*.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 10704:2015](https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015)

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

Water quality — Measurement of gross alpha and gross beta activity in non-saline water — Thin source deposit method

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This International 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.

IMPORTANT — It is absolutely essential that tests conducted according to this International Standard be carried out by suitably trained staff.

1 Scope

This International Standard specifies a method for the determination of gross alpha and gross beta activity in non-saline waters for alpha- and beta-emitting radionuclides.

The method is applicable to raw and potable waters containing a small quantity of dissolved matter. It can, after adaptation, apply to other kind of waters.

The range of application depends upon the amount of dissolved material in the water and on the performance characteristics of the measurement equipment (background count rate and counting efficiency).

<https://standards.iteh.ai/catalog/standards/sist/bec52926-4b04-4ba1-9465-7f1846191929/sist-en-iso-10704-2015>

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 5667-1, *Water quality — Sampling — Part 1: Guidance on the design of sampling programmes and sampling techniques*

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

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO 80000-10, *Quantities and units — Part 10: Atomic and nuclear physics*

ISO/IEC Guide 98-3:2008, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*