

<b>STN</b>	<b>Kvalita vody. Stanovenie celkovej objemovej aktivity alfa a celkovej objemovej aktivity beta v neslanej vode. Metóda kvapalinového scintilačného merania (ISO 11704: 2010).</b>	<b>STN EN ISO 11704</b>  75 7621
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Water quality - Measurement of gross alpha and beta activity concentration in non-saline water - Liquid scintillation counting method (ISO 11704:2010)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/16

Obsahuje: EN ISO 11704:2015, ISO 11704:2010

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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2016  
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

ICS 17.240; 13.060.60

English Version

## Water quality - Measurement of gross alpha and beta activity concentration in non-saline water - Liquid scintillation counting method (ISO 11704:2010)

Qualité de l'eau - Mesurage des activités alpha globale et bêta globale des eaux non salines - Méthode de comptage par scintillation liquide (ISO 11704:2010)

Wasserbeschaffenheit - Bestimmung der Gesamt-Alpha- und Gesamt-Beta-Aktivität in nicht-salzhaltigem Wasser - Verfahren mit dem Flüssigszintillationszähler (ISO 11704:2010)

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## European foreword

The text of ISO 11704:2010 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 11704:2015 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of an identical text or by endorsement, at the latest by February 2016, and conflicting national standards shall be withdrawn at the latest by February 2016.

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### Endorsement notice

The text of ISO 11704:2010 has been approved by CEN as EN ISO 11704:2015 without any modification.

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**Water quality — Measurement of gross  
alpha and beta activity concentration in  
non-saline water — Liquid scintillation  
counting method**

*Qualité de l'eau — Mesurage des activités alpha globale et bêta globale  
des eaux non salines — Méthode de comptage par scintillation liquide*



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## 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.

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ISO 11704 was prepared by Technical Committee ISO/TC 147, *Water quality*.



# Water quality — Measurement of gross alpha and beta activity concentration in non-saline water — Liquid scintillation counting method

**WARNING** — Persons using this International 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.

**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 waters for radionuclides which are not volatile at 80 °C. Radon isotopes and their decay products of short half life are not included in the determination.

The method is applicable to raw and potable waters with a dry residue less than 5 g/l and when no correction for colour quenching is necessary.

## 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 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*

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