
Water quality — Gross alpha and gross beta activity — Test method using thin source deposit

Qualité de l'eau — Activités alpha globale et bêta globale — Méthode d'essai par dépôt d'une source fine

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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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).

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This document was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 3, *Radioactivity measurements*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This second edition cancels and replaces the first edition (ISO 10704:2009), which has been technically revised. The main changes compared to the previous edition are as follows:

- Introduction: an introduction has been added;
- [Clause 1](#): the scope has been modified to specify applicability to emergency situations and applicability of waste water as a test sample; information about the exclusion of low energy beta emitters has also been added;
- [Clause 4](#): the filtration has been specified to be carried out at 0,45 µ;
- [5.1.2.2](#): ¹³⁷Cs has been introduced as a standard that can be used;
- [5.2.4](#): the recommended thickness has been increased to up to 400 µg/cm²;
- [7.6.3.1](#): in order to evaluate self-absorption phenomena, spiking method has been recommended to mimic the nature of the salt;
- [Clause 8](#):
 - a new [Formula \(9\)](#) has been introduced to obtain the beta activity concentration when systematic correction is not required;
 - the subsequent Formulae have been renumbered;
- [Clause 9](#): several limitations and interferences have been given;
- [9.1](#): the natural radionuclides contributions have been given.