



**International
Standard**

ISO 17294-2

**Water quality — Application of
inductively coupled plasma mass
spectrometry (ICP-MS) —**

Part 2:

**Determination of selected elements
including uranium isotopes**

*Qualité de l'eau — Application de la spectrométrie de masse avec
plasma à couplage inductif (ICP-MS) —*

*Partie 2: Dosage des éléments sélectionnés y compris les isotopes
d'uranium*

**Third edition
2023-10**

**Corrected version
2024-02**

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

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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.

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 document 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 2, *Physical, chemical and biochemical methods*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 230, *Water analysis*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 17294-2:2016), which has been technically revised.

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The main changes are as follows:

- with the incorporation of mercury in the previous edition, mercury has now been excluded as a hydrolysable and has now become a non-hydrolysable element because it was not in line with the other existing standards for the determination of mercury;
- the addition of a modifier has been clarified;
- titanium has been added to the scope.

A list of all parts in the ISO 17294 series can be found on the ISO website.

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 corrected version of ISO 17294-2:2023 incorporates the following corrections:

- Note 1 to entry has been moved from the terminological entry [3.1.26](#) to [3.1.16](#);
- the symbols "*k*", "*α*" and "*β*" have been revised in [3.2](#) and the symbols "*η*" and "*o*" have been revised in [Tables C.3](#) and [C.5](#), respectively;
- [Clause 12 b](#)) has been editorially revised;
- "²⁰⁴Tl" has been changed to "²⁰⁵Tl or ¹⁹³Ir" in [Clause A.2](#);

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- [Formula \(A.3\)](#) has been revised from " $R = r \left(\frac{m_A}{m_B} \right)^\beta$ " to " $R = r \left(\frac{m_A}{m_B} \right)^\beta$ ";
- the descriptions of symbols " l ", " n " and " $\bar{\bar{x}}$ " have been revised in Table C.5.

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