***भारतीय मानक***

***Indian Standard***

**IS 3025 (Part 65) : 20XX**

**ISO 17294-2 : 2023**

**CHD/36/26079 F**

**जल और अपशिष्ट जल के नमूने लेने तथा परीक्षण (भौतिक एवं रसायन) की पद्धतियाँ**

भाग 65 उपपादन द्वारा मिलकर प्लाज्मा मास स्पेक्ट्रोमेट्री (आईसीपी-एमएस) के अनुप्रयोग — यूरेनियम आइसोटोपस सहित चयनित तत्त्वो का निर्धारण

(दूसरा पुनरीक्षण)

**Methods of Sampling and Test (Physical and Chemical) for Water and Wastewater**

Part 65 Application of Inductively Coupled Plasma Mass Spectrometry (ICP-MS) — Determination of Selected Elements Including Uranium Isotopes

(*Second Revision*)

ICS 13.060.50

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भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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**September 2024 Price Group**

Water Quality Sectional Committee, CHD 36

**NATIONAL FOREWORD**

This Indian Standard which is identical with ISO 17294-2: 2023 Water quality — Application of Inductively coupled plasma mass spectrometry (ICP-MS) Part 2 : Determination of Selected Elements Including Uranium Isotopes” issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of Water Quality Sectional Committee and approval of the Chemical Division Council.

This standard was published in 2014 and subsequently revised in 2022 which was identical to ISO 17294-2: 2016. This second revision has been undertaken to adopt the latest version of ISO 17294-2 published in 2023. In this revision the following changes have been incorporated:

a) 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;

b) The addition of a modifier has been clarified; and

c) Titanium has been added to the scope.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Whenever the words ‘International Standard; appears referring to this standard, they should be read as ‘Indian Standard’.

b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards where the standard atmospheric conditions to be observed are stipulated which are not applicable to tropical/subtropical countries. The applicable standard atmospheric conditions for Indian conditions are 27 ± 2 °C and 65 ± 5 percent relative humidity and shall be observed while using this standard.

In this adopted standard, references appear to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

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| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| IS0 5667-1 Water quality — Sampling — Part 1: Guidance on the design of sampling programmes and sampling techniques | IS 17614 (Part 1): XXXXISO 5667-1: 2023  Water quality — Sampling — Part 1: Guidance on the design of sampling programmes and sampling techniques (*under print*) | Identical with ISO 5667-1 : 2023 |
| IS0 5667-3 Water quality — Sampling — Part 3: Preservation and handling of water samples | IS 17614 (Part 3): XXXXISO 5667-3: 2024 Water quality — Sampling — Part 3: Preservation and handling of water samples (*under print*) | Identical with ISO 5667-3 : 2024 |
| ISO 8466-1 Water quality — Calibration and evaluation of analytical methods — Part 1: Linear calibration function | IS 18612 (Part 1) : 2024/ISO 8466-1:2021 Water quality Calibration and evaluation of analytical methods Part 1: Linear calibration function | Identical with ISO 8466-1:2021 |
| ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories | IS/ISO/IEC 17025 : 2017 General requirements for the competence of testing and calibration laboratories (*second revision*) | Identical with ISO/IEC 17025 : 2017 |
| ISO 17294-1: 2004 Water quality — Application of inductively coupled plasma mass spectrometry (ICP-MS) — Part 1: General guidelines | IS 3025 (Part 64): XXXISO 17294-1: 2024 Methods of Sampling and Test (Physical and Chemical) for Water and Wastewater : Part 64 Application of Inductively Coupled Plasma Mass Spectrometry (ICP-MS) — General Guidelines (*under print*) | Identical with ISO 17294-1: 2024 |

The Technical Committee responsible for the preparation of this standard has reviewed the provisions of the below mentioned ISO/IEC standards and has decided that they are acceptable for use in conjunction with this standard.

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| *International Standard* | *Title* |
| ISO 15587-1 | Water quality — Digestion for the determination of selected elements in water — Part 1: Aqua regia digestion  |
| ISO 15587-2 | Water quality — Digestion for the determination of selected elements in water — Part 2: Nitric acid digestion  |

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2: 2022 ‘Rules for rounding off numerical values (*second revision*)’.