

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

जल की गुणवत्ता — नमूने लेने
भाग 3 जल के नमूनों का संरक्षण और संचालन
(पहला पुनरीक्षण)

Draft Indian Standard

Water Quality — Sampling
Part 3 Preservation and Handling of Water Samples
[*First Revision of IS 17614 (Part 3)*]

ICS 13.060.45

Water Quality Sectional Committee, CHD 36

Last date for Comments: 07.09.2024

NATIONAL FOREWORD

(Formal clause will be added later)

This standard was published in 2021 as an identical adoption of ISO 5667-3: 2018 under dual numbering. This part of IS 17614 specifies the general requirements for sampling, preservation, handling, transport and storage of all water samples for physicochemical, chemical, hydrobiological and microbiological analyses and determination of radiochemical analytes and activities. This standard is particularly appropriate when samples cannot be analyzed on site and have to be transported to a laboratory for analysis.

Under the general title 'WATER QUALITY — SAMPLING', this standard is being published in several other parts. The other parts of this series are:

<i>IS No</i>	<i>Title</i>
IS 17614: 2021	Water quality — Sampling
(Part 1): 2021	Guidance on the design of sampling programmes and sampling techniques
(Part 4): 2021	Guidance on sampling from lakes, natural and man-made

- (Part 5): 2021 Guidance on sampling of drinking water from treatment works and piped distribution systems
- (Part 6): 2021 Guidance on sampling of rivers and streams
- (Part 7): 2021 Guidance on sampling of water and steam in boiler plants
- (Part 8): 2021 Guidance on the sampling of wet deposition
- (Part 9): 2021 Guidance on sampling from marine waters
- (Part 10): 2021 Guidance on sampling of waste waters
- (Part 12): 2022 Guidance on sampling of bottom sediments from rivers, lakes and estuarine areas
- (Part 13): 2021 Guidance on sampling of sludges
- (Part 14): 2021 Guidance on quality assurances and quality control of environmental water sampling and handling
- (Part 15): 2021 Guidance on the preservation and handling of sludge and sediment samples
- (Part 16): 2021 Guidance on biotesting of samples
- (Part 17): 2022 Guidance on sampling of bulk suspended solids
- (Part 19): 2021 Guidance on sampling of marine sediments
- (Part 20): 2021 Guidance on the use of sampling data for decision making — Compliance with thresholds and classification systems
- (Part 22): 2021 Guidance on the Design and Installation of Groundwater Monitoring Points
- (Part 23): 2021 Guidance on Passive Sampling in Surface Waters
- (Part 24): 2021 Guidance on the Auditing of Water Quality Sampling
- (Part 25): 2022 Microbiological Analysis

This first revision has been brought out to adopt the latest version of ISO 5667-3 published in 2024. In this revision, following modifications have been incorporated:

- ISO/TS 5667-25 has been added as a reference;
- A flow diagram from preservation and storage of water samples has been added;
- References in Table A.1 have been updated;
- References in Table A.2 and A.3 have been added;
- The previous Table A.1 has been split into Table A.1 on inorganic analytes and Table A.2 on organic analytes;
- Table A.4 on microbiological analysis has been added;
- Types of water have been added to Tables A.1 to A.5; and
- The added terms used in Tables A.1 to A.5 have been explained.

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 ‘This document’; appears referring to this standard, they should be read as ‘This 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 $27^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 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:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 19458: 2006 Water Quality — Sampling for microbiological analysis	IS 17614 (Part 25) : 2022/ISO 19458: 2006 Water Quality Sampling Part 25 for Microbiological Analysis	Identical with ISO 19458: 2006

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*)’.