



International
Standard

ISO 5667-4

Water quality — Sampling —

Part 4:

**Guidance on sampling from lakes,
natural and man-made**

Qualité de l'eau — Échantillonnage —

*Partie 4: Lignes directrices pour l'échantillonnage des eaux des
lacs naturels et des lacs artificiels*

**Third edition
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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 6, *Sampling (general methods)*.

This third edition cancels and replaces the second edition (ISO 5667-4:2016), of which it constitutes a minor revision.

The change is as follows: the following sentence has been added to the scope: "For specific guidance on the sampling for microplastics, see ISO 5667-27".

A list of all parts in the ISO 5667 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.

Water quality — Sampling —

Part 4:

Guidance on sampling from lakes, natural and man-made

1 Scope

This document gives guidelines for the design of sampling programmes, techniques and the handling and preservation of samples of water, from natural and man-made lakes during open-water and ice-covered conditions. This document is applicable to lakes with and without aquatic vegetation.

Guidance on sampling for microbiological examination is not included. For specific guidance on the sampling for microplastics, see ISO 5667-27.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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: Preservation and handling of water samples*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— <https://standards.iteh.ai/catalog/standards/iso/b3b05046-7a64-4804-9275-63334ca263aa/iso-5667-4-2026>

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org/>

3.1

grab sample

single discrete sample collected from a body of water at a specific time, location and depth

3.2

depth profile sample

two or more discrete samples collected at two or more depths at a specific time and location on a lake

3.3

area profile sample

two or more discrete samples collected from the same depth at two or more locations on a lake

3.4

composite sample

two or more *depth profile* (3.2) or *area profile samples* (3.3) that are combined to form a single sample prior to measurement of water quality parameters

3.5

integrated sample

single sample collected by a tube or similar sampler that collects a water sample across a range of depths