

VEE KVALITEET

Proovivõtt

**Osa 4: Juhised looduslikest ja tehisjärvedest
proovide võtmiseks**

Water quality

Sampling

**Part 4: Guidance on sampling from lakes,
natural and man-made
(ISO 5667-4:2016)**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

<p>See Eesti standard EVS-ISO 5667-4:2016 „Vee kvaliteet. Proovivõtt. Osa 4: Juhised looduslikest ja tehiskärvetest proovide võtmiseks“ sisaldab rahvusvahelise standardi ISO 5667-4:2016 „Water quality – Sampling – Part 4: Guidance on sampling from lakes, natural and man-made“ identset ingliskeelset teksti.</p>	<p>This Estonian Standard EVS-ISO 5667-4:2016 consists of the identical English text of the International Standard ISO 5667-4:2016 „Water quality – Sampling – Part 4: Guidance on sampling from lakes, natural and man-made“.</p>
<p>Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtuks on esitanud EVS/TK 47, standardi avaldamist on korraldanud Eesti Standardikeskus.</p>	<p>Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 47, the Estonian standard has been published by the Estonian Centre for Standardisation.</p>
<p>Standard EVS-ISO 5667-4:2016 on jõustunud sellekohase teate avaldamisega EVS Teataja 2016. aasta detsembrikuu numbris.</p>	<p>Standard EVS-ISO 5667-4:2016 has been endorsed with a notification published in the December 2016 issue of the official bulletin of the Estonian Centre for Standardisation.</p>
<p>Standard on kättesaadav Eesti Standardikeskusest.</p>	<p>The standard is available from the Estonian Centre for Standardisation.</p>

Käsitlusala

Standardisarja ISO 5667 see osa annab juhised proovivõtuplaanide kavandamiseks, looduslikest ja tehiskärvetest avavee ja jääkatte perioodil võetud veeproovide võtmise tehnikale, proovide käsitsemiseks ja säilitamiseks. Standardisarja ISO 5667 see osa on rakendatav nii veetaimestikuga kui ka -taimestikuta järvede jaoks.

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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 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 147, *Water quality*, Subcommittee SC 6, *Sampling (general methods)*.

This second edition cancels and replaces the first edition (ISO 5667-4:1987), which has been technically revised.

ISO 5667 consists of the following parts, under the general title *Water quality — Sampling*:

- *Part 1: Guidance on the design of sampling programmes and sampling techniques*
- *Part 3: Preservation and handling of water samples*
- *Part 4: Guidance on sampling from lakes, natural and man-made*
- *Part 5: Guidance on sampling of drinking water from treatment works and piped distribution systems*
- *Part 6: Guidance on sampling of rivers and streams*
- *Part 7: Guidance on sampling of water and steam in boiler plants*
- *Part 8: Guidance on the sampling of wet deposition*
- *Part 9: Guidance on sampling from marine waters*
- *Part 10: Guidance on sampling of waste waters*
- *Part 11: Guidance on sampling of groundwaters*
- *Part 12: Guidance on sampling of bottom sediments*
- *Part 13: Guidance on sampling of sludges*
- *Part 14: Guidance on quality assurance and quality control of environmental water sampling and handling*

- *Part 15: Guidance on the preservation and handling of sludge and sediment samples*
- *Part 16: Guidance on biotesting of samples*
- *Part 17: Guidance on sampling of bulk suspended solids*
- *Part 19: Guidance on sampling of marine sediments*
- *Part 20: Guidance on the use of sampling data for decision making — Compliance with thresholds and classification systems*
- *Part 21: Guidance on sampling of drinking water distributed by tankers or means other than distribution pipes*
- *Part 22: Guidance on the design and installation of groundwater monitoring points*
- *Part 23: Guidance on passive sampling in surface waters*
- *Part 24: Guidelines for the auditing of water quality sampling*

Water quality — Sampling —

Part 4:

Guidance on sampling from lakes, natural and man-made

1 Scope

This part of ISO 5667 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 part of ISO 5667 is applicable to lakes with and without aquatic vegetation.

Guidance on sampling for microbiological examination is not included.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5667-1, *Water quality — Sampling — Part 1: Guidance on the design of sampling programmes and sampling techniques*

ISO 5667-3, *Water quality — Sampling — Part 3: Preservation and handling of water samples*

ISO 5667-14, *Water quality — Sampling — Part 14: Guidance on quality assurance and quality control of environmental water sampling and handling*

ISO 7027, *Water quality — Determination of turbidity*

3 Terms and definitions

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

3.1

grab sample

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

3.2

depth profile samples

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

3.3

area profile samples

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