

**Vee kvaliteet. Proovivõtt. Osa 13:
Setteproovide võtmise juhend reovee ja
vee töötlemise teostamisel**

Water quality - Sampling - Part 13: Guidance on
sampling of sludges from sewage and water
treatment works

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 5667-13:2007 sisaldab Euroopa standardi EN ISO 5667-13:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.02.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 5667-13:2007 consists of the English text of the European standard EN ISO 5667-13:1997.</p> <p>This document is endorsed on 28.02.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>Käesolev standard annab juhiseid setteproovide võtmiseks heitvee (reovee) töötlemise protsessidest, vee töötlemise protsessidest ja tööstuslikest protsessidest. Standard on kohaldatav kõikidele setteliikidele, mis tekivad nimetatud tööde käigus ja samuti setetele, mis on sellesarnaste näitajatega, näiteks septikute setetele. Esitatud on ka juhised proovivõtukavade väljatöötamiseks ja proovikogumistehnika kohta.</p>	<p>Scope:</p> <p>This part of ISO 5667 gives guidance on the sampling of sludges from wastewater treatment works, water treatment works and industrial processes. It is applicable to all types of sludge arising from these works and also to sludges of similar characteristics, for example septic tank sludges. Guidance is also given on the design of sampling programmes and techniques for the collection of samples.</p>
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Võtmesõnad: heitvesi, kvaliteet, proovivõtt, proovivõtuseadmed, reeglid, settled, vee saastumine, vesi

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Descriptors: Water analysis, sampling, sewage sludge.

English version

Water quality – Sampling

Part 13: Guidance on sampling of sludges from sewage
and water treatment works
(ISO 5667-13 : 1997)

Qualité de l'eau – Échantillonnage –
Partie 13: Guide pour l'échantillonnage
de boues provenant d'installations
de traitement de l'eau et des
eaux usées (ISO 5667-13 : 1997)

Wasserbeschaffenheit – Probenahme –
Teil 13: Anleitung zur Probenahme von
Schlämmen aus Abwasserbehandlungs-
und Wasseraufbereitungsanlagen
(ISO 5667-13 : 1997)

This European Standard was approved by CEN on 1997-12-20.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
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Foreword

International Standard

ISO 5667-13 : 1997 Water quality – Sampling – Part 13: Guidance on sampling of sludges from sewage and water treatment works,

which was prepared by ISO/TC 147 'Water quality' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 308 'Characterization of sludges', the Secretariat of which is held by AFNOR, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 1998 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard :

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 5667-13 : 1997 was approved by CEN as a European Standard without any modification.

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Introduction

This part of ISO 5667 should be read in conjunction with ISO 5667-1, ISO 5667-2 and ISO 5667-3. The general terminology used is in accordance with the various parts of ISO 6107.

Sampling and the determination of the physical and chemical properties of sludges and related solids are normally carried out for a specific purpose. The sampling methods given are suitable for general use but do not exclude modification in the light of any special factor known to the analyst receiving the samples or any operational reason dictating the need for sampling.

The importance of using a valid sampling technique cannot be overemphasized if the subsequent analysis is to be worthwhile. It is important that the personnel taking and analysing the sample be fully aware of its nature and the purpose for which the analysis is required before embarking on any work programme. Full cooperation with the laboratory that will be analysing the samples ensures that the most effective application of the sampling occasion can be made. For example, the use of method-specific sample preservation techniques will assist in the accurate determination of results.

1 Scope

This part of ISO 5667 gives guidance on the sampling of sludges from wastewater treatment works, water treatment works and industrial processes. It is applicable to all types of sludge arising from these works and also to sludges of similar characteristics, for example septic tank sludges. Guidance is also given on the design of sampling programmes and techniques for the collection of samples.

This part of ISO 5667 is applicable to sampling motivated by different objectives, some of which are to:

- provide data for the operation of activated sludge plants;
- provide data for the operation of sludge treatment facilities;
- determine the concentration of pollutants in wastewater sludges for disposal to landfill;
- test whether prescribed substance limits are contravened when sludge is used in agriculture;
- provide information on process control in potable and wastewater treatment, including:
 - a) addition or withdrawal of solids;
 - b) addition or withdrawal of liquid;
- provide information for legally enforceable aspects of the disposal of sewage and waterworks' sludges;
- facilitate special investigations into the performance of new equipment and processes;
- optimize costs; for example for the transport of sludges for treatment and/or disposal.

NOTE When designing a sludge sampling programme, it is essential that the objectives of the study be kept in mind, so that the information gained corresponds to that required. In addition, the data should not be distorted by the use of inappropriate techniques, such as inadequate storage temperatures or the sampling of unrepresentative parts of a treatment plant.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 5667. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 5667 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5667-2:1991, *Water quality — Sampling — Part 2: Guidance on sampling techniques*.

ISO 5667-3:1994, *Water quality — Sampling — Part 3: Guidance on the preservation and handling of samples*.

ISO 5667-12:1995, *Water quality — Sampling — Part 12: Guidance on sampling of bottom sediments*.

ISO 5667-14: —¹, *Water quality — Sampling — Part 14: Guidance on quality assurance of environmental water sampling and handling*.

ISO 8363: —², *Measurement of liquid flow in open channels — General guidelines for selection of method*.

ISO 10381-6:1993, *Soil quality — Sampling — Part 6: Guidance on the collection, handling and storage of soil for the assessment of aerobic microbial processes in the laboratory*.

3 Definitions

For the purposes of this part of ISO 5667, the following definitions apply:

3.1 grab sample

discrete sample taken randomly (with regard to time and/or location) from a body of sludge

[Based on ISO 6107-2]

3.2 composite sample

two or more samples or subsamples, mixed together in appropriate known proportions (either discretely or continuously), from which the average value of a desired characteristic may be obtained

NOTE The proportions are usually based on time or flow measurements.

[Based on ISO 6107-2]

¹ To be published.

² To be published. (Revision of ISO 8363:1986)