

## **Characterisation of sludges - Settling properties - Part 1: Determination of settleability (Determination of the proportion of sludge volume and sludge volume index)**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14702-1:2006 sisaldab Euroopa standardi EN 14702-1:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 24.11.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14702-1:2006 consists of the English text of the European standard EN 14702-1:2006.</p> <p>This document is endorsed on 24.11.2006 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><b>Käsitlusala:</b> This document specifies a method for the determination of the settleability of sludge suspensions.</p>	<p><b>Scope:</b> This document specifies a method for the determination of the settleability of sludge suspensions.</p>
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**Võtmesõnad:**

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English Version

**Characterisation of sludges - Settling properties - Part 1:  
Determination of settleability (Determination of the proportion of  
sludge volume and sludge volume index)**

Caractérisation des boues - Propriétés de sédimentation -  
Partie 1: Détermination de l'aptitude à la sédimentation  
(Détermination du volume de boues et de l'indice de boues)

Charakterisierung von Schlämmen - Absetzeigenschaften -  
Teil 1: Bestimmung der Absetzbarkeit (Bestimmung des  
Schlammvolumens und des Schlammvolumenindex)

This European Standard was approved by CEN on 3 February 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. 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.

This European Standard exists 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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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 14702-1:2006) has been prepared by Technical Committee CEN/TC 308 "Characterisation of sludges", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2006, and conflicting national standards shall be withdrawn at the latest by September 2006.

Another part of this European Standard is:

— Part 2: Determination of thickenability.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

Determination of the settleability via the determination of the proportion of sludge volume is an operational parameter and enables an assessment to be made (admittedly only within limits) of the dry matter content of a mixture of sludge and water. The value is used for calculating the rate of sludge settling and calculating the sludge volume index and to evaluate the performance of settling tanks.

## 1 Scope

This document specifies a method for the determination of the settleability of sludge suspensions. This document is applicable to sludge suspensions from:

- storm water handling;
- urban wastewater collecting systems;
- urban wastewater treatment plants;
- treating industrial wastewater similar to urban wastewater (as defined in Directive 91/271 EEC);
- water supply treatment plants.

This method is also applicable to sludge suspensions from other origin.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 872, *Water quality — Determination of suspended solids — Method by filtration through glass fibre filters*

EN 12880, *Characterization of sludges — Determination of dry residue and water content*

EN 1085:1997, *Waste water treatment — Vocabulary*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1085:1997 and the following apply.

### 3.1

#### **settleability**

ability of sludge solids to separate from water by sedimentation under gravity

### 3.2

#### **settled sludge volume**

volume of the sludge solids suspension after settling under specified conditions  
[7360, EN 1085:1997]

### 3.3

#### **sludge volume index**

sludge volume divided by the concentration of dry matter by mass in the sludge  
[7370, EN 1085:1997]

## 4 Principle

The settled sludge volume and the sludge volume index are determined by a 30 min settling of a sludge suspension.