

Wastewater treatment plants - Part 13: Chemical treatment

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treatment

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12255-13:2003 sisaldab Euroopa standardi EN 12255-13:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12255-13:2003 consists of the English text of the European standard EN 12255-13:2002.</p> <p>This document is endorsed on 18.02.2003 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>This European Standard gives the application, procedure and specifies the requirements for chemical treatment of wastewater for removal of phosphorus and suspended solids. Differences in wastewater treatment throughout Europe have led to a variety of practices being developed. This standard gives fundamental informations about the practices; this standard has not attempted to specify all available practices.</p>	<p>Scope:</p> <p>This European Standard gives the application, procedure and specifies the requirements for chemical treatment of wastewater for removal of phosphorus and suspended solids. Differences in wastewater treatment throughout Europe have led to a variety of practices being developed. This standard gives fundamental informations about the practices; this standard has not attempted to specify all available practices.</p>
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Võtmesõnad: chemical industry, orthophosphates, seats, sewage, sewage purification, sewage purification plant, sewage treatment, sewage treatment plants, sewage treatment works, siting, specification (approval), specifications, storage, suspensions (chemical), water practice

ICS 13.060.30

English version

Wastewater treatment plants - Part 13: Chemical treatment - Treatment of wastewater by precipitation/flocculation

Stations d'épuration - Partie 13: Traitement chimique -
Traitement des eaux usées par précipitation/flocculation

Kläranlagen - Teil 13: Chemische Behandlung -
Abwasserbehandlung durch Fällung/Flockung

This European Standard was approved by CEN on 1 November 2002.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN 12255-13:2002) has been prepared by Technical Committee CEN/TC 165 "Waste water engineering", the secretariat of which is held by DIN.

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 June 2003, and conflicting national standards shall be withdrawn at the latest by June 2003.

It is the thirteenth part prepared by the Working Groups CEN/TC 165/WG 42 and 43 relating to the general requirements and processes for wastewater treatment plants for a total number of inhabitants and population equivalents (PE) over 50. The parts of the series are as follows:

- Part 1: General construction principles
- Part 3: Preliminary treatment
- Part 4: Primary settlement
- Part 5: Lagooning processes
- Part 6: Activated sludge process
- Part 7: Biological fixed-film reactors
- Part 8: Sludge treatment and storage
- Part 9: Odour control and ventilation
- Part 10: Safety principles
- Part 11: General data required
- Part 12: Control and automation
- Part 13: Chemical treatment - Treatment of wastewater by precipitation/flocculation
- Part 14: Disinfection
- Part 15: Measurement of the oxygen transfer in clean water in activated sludge aeration tanks
- Part 16: Physical (mechanical) filtration ¹⁾

NOTE For requirements on pumping installations at wastewater treatment plants, provided initially as part 2 "Pumping installations for wastewater treatment plants", see EN 752-6 "Drain and sewer systems outside buildings — Part 6: Pumping installations".

The parts EN 12255-1, EN 12255-3 to EN 12255-8 and EN 12255-10 and EN 12255-11 were implemented together as a European package (Resolution BT 152/1998).

WARNING — The use of this European Standard may involve hazardous materials, operations and equipment. This European Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this European Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use (see also EN 12255-10).

Annex A is normative.

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

¹⁾ in preparation

1 Scope

This European Standard specifies the requirements for chemical treatment of wastewater by precipitation/flocculation for removal of phosphorus and suspended solids.

The application of polymers is not described in this European Standard.

Differences in wastewater treatment throughout Europe have led to a variety of practices being developed. This standard gives fundamental information about the practices; this standard has not attempted to specify all available practices.

Detailed information additional to that contained in this standard may be obtained by referring to the bibliography.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 752-6, *Drain and sewer systems outside buildings — Part 6: Pumping installations.*

EN 1085:1997, *Wastewater treatment — Vocabulary.*

EN 10088-2, *Stainless steels — Part 2: Technical delivery conditions for sheet/plate and strip for general purposes.*

EN 12255-1, *Wastewater treatment plants — Part 1: General construction principles.*

EN 12255-6, *Wastewater treatment plants — Part 6: Activated sludge process.*

EN 12255-11, *Wastewater treatment plants — Part 11: General data required.*

EN 12518:2000, *Chemicals used for treatment of water intended for human consumption — High-calcium lime.*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 1085:1997 and EN 12518:2000 and the following apply.

3.1

chemical treatment of wastewater

treatment of wastewater by chemical coagulation/precipitation with metal salts (including lime) or organic polymers in order to remove inorganic and organic phosphorus compounds and suspended solids and colloids