Reovee väikepuhastid kuni 50 i.e. Osa 7: Tööstuslikult valmistatud süvapuhastid

Small wastewater treatment systems for up to 50 PT th tertice. Part 7: Prefabricated tertiary treatment units



## **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

See Eesti standard EVS-EN 12566-7:2013 sisaldab	This Estonian standard EVS-EN 12566-7:2013
Euroopa standardi EN 12566-7:2013 ingliskeelset	consists of the English text of the European standard
teksti.	EN 12566-7:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
, and a second s	Date of Availability of the European standard is 17.04.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <a href="mailto:standardiosakond@evs.ee">standardiosakond@evs.ee</a>.

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## **EUROPEAN STANDARD**

## EN 12566-7

## NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

April 2013

ICS 13.060.30

## **English Version**

# Small wastewater treatment systems for up to 50 PT - Part 7: Prefabricated tertiary treatment units

Petites installations de traitement des eaux usées jusqu'à 50 PTE - Partie 7: Unités de traitement tertiaire préfabriquées

Kleinkläranlagen für bis zu 50 EW - Teil 7: Vorgefertigte Anlagen für eine dritte Reinigungsstufe

This European Standard was approved by CEN on 1 March 2013.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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## **Foreword**

This document (EN 12566-7:2013) 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 October 2013, and conflicting national standards shall be withdrawn at the latest by October 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The series EN 12566, *Small wastewater treatment systems for up to 50 PT*, contains the following parts (see Figure 1):

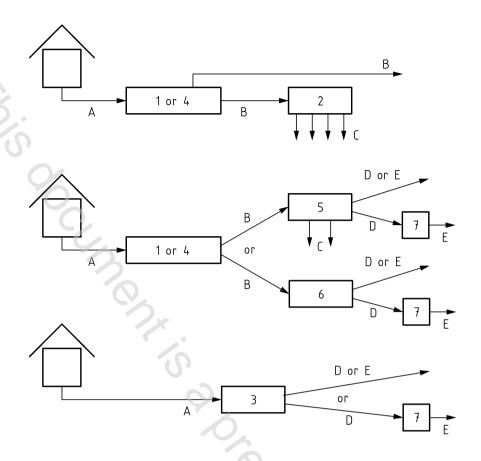
- Part 1: Prefabricated septic tanks;
- Part 3: Packaged and/or site assembled domestic wastewater treatment plants;
- Part 4: Septic tanks assembled in situ from prefabricated kits;
- Part 6: Prefabricated treatment unit used for septic tank effluent;
- Part 7: Prefabricated tertiary treatment unit (this document).

For filtration and infiltration systems, CEN/TC 165 decided to publish the following CEN Technical Reports, which are considered as code of practices and do not specify treatment requirements:

- CEN/TR 12566-2, Small wastewater treatment systems for up to 50 PT Part 2: Soil infiltration systems
- CEN/TR 12566-5, Small wastewater treatment systems for up to 50 PT Part 5: Pre-treated Effluent Filtration systems

This European Standard provides the general requirements for tertiary packaged and/or site assembled treatment units used for the treatment of secondary effluent.

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



### Key

- A raw domestic wastewater 1 prefabricated septic tank
- B septic tank effluent 2 soil infiltration system
- C treated infiltrated effluent 3 packaged and/or site assembled domestic wastewater treatment plant
- D treated wastewater 4 septic tank assembled in situ from prefabricated kit
- E tertiary treated wastewater 5 pre-treated effluent filtration system
  - 6 prefabricated treatment unit used for septic tank effluent

5

7 prefabricated tertiary treatment unit

National regulations may specify different arrangements between the products described in the standard series EN 12566.

Figure 1 — Scheme related to the arrangement of the parts of EN 12566

## 1 Scope

This European Standard specifies requirements, test methods, the marking and evaluation of conformity for a packaged and/or site assembled tertiary treatment unit for installation either separately or in a pre-existing unit (see 3.9).

It applies for tertiary treatment units that are placed on the market as complete units used for the tertiary treatment of domestic wastewater by biological, physical, chemical, electrical processes and coming from:

- a) units in accordance with EN 12566-3 or EN 12566-6;
- b) installations designed and constructed in accordance with CEN/TR 12566-5.

Equivalent secondary treated effluent may come from existing systems.

Package and/or site assembled tertiary treatment units according to this standard consist of one or more watertight tanks without any direct infiltration into the ground, made of concrete, corrosion resistant or coated steel, un-plasticised poly-vinyl chloride (PVC-U), polyethylene (PE), glass reinforced thermosetting plastics (GRP) based on polyester resin (UP) (GRP-UP), polypropylene (PP), polydicyclopentadiene (PDCPD) and flexible sheets (PEHD, PP, PVE and EPDM).

NOTE Some product covered by this standard sold without a tank could be introduced in an existing tank.

This standard applies to tertiary treatment units for use above ground (outside the building) or buried in the ground where no vehicle loads are applied to the unit.

This standard does not apply to tertiary treatment systems forming part of units covered by EN 12566-3 and EN 12566-6.

This standard does not cover the systems for micro-organism reduction.

### 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.

EN 1085:2007, Wastewater treatment — Vocabulary

EN 12311-2, Flexible sheets for waterproofing — Determination of tensile properties — Part 2: Plastic and rubber sheets for roof waterproofing

EN 12566-3:2005+A1:2009, Small wastewater treatment systems for up to 50 PT — Part 3: Packaged and/or site assembled domestic wastewater treatment plants

EN 12566-6:2013, Small wastewater treatment systems for up to 50 PT — Part 6: Prefabricated treatment units for septic tank effluent

EN 13501-1, Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests

EN 14150, Geosynthetic barriers — Determination of permeability to liquids

EN ISO 527 (all parts), Plastics — Determination of tensile properties (ISO 527)

EN ISO 2555, Plastics — Resins in the liquid state or as emulsions or dispersions — Determination of apparent viscosity by the Brookfield Test method (ISO 2555)