SLOVENSKI STANDARD
oSIST prEN ISO 16387:2012

01-junij-2012

Kakovost tal - Vpliv onesnaževal na enhitreje (Enchytraeus sp.) - Ugotavljanje vplivov na razmnoževanje (ISO/DIS 16387:2012)

Soil quality - Effects of pollutants on Enchytraeidae (Enchytraeus sp.) - Determination of effects on reproduction (ISO/DIS 16387:2012)

Bodenbeschaffenheit - Wirkungen von Schadstoffen auf Enchytraeidae (Enchytraeus sp.) - Bestimmung der Wirkungen auf die Reproduktion (ISO/DIS 16387:2012)

Qualité du sol - Effets des polluants sur les Enchytraeidae (Enchytraeus sp.) - Détermination des effets sur la survie et la reproduction (ISO/DIS 16387:2012)

Ta slovenski standard je istoveten z: **prEN ISO 16387**

ICS:

13.080.30	Biološke lastnosti tal	Biological properties of soils

oSIST prEN ISO 16387:2012 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN ISO 16387

April 2012

ICS 13.080.30

English Version

Soil quality - Effects of pollutants on Enchytraeidae (Enchytraeus sp.) - Determination of effects on reproduction (ISO/DIS 16387:2012)

Qualité du sol - Effets des polluants sur les Enchytraeidae (Enchytraeus sp.) - Détermination des effets sur la survie et la reproduction (ISO/DIS 16387:2012)

Bodenbeschaffenheit - Wirkungen von Schadstoffen auf Enchytraeidae (Enchytraeus sp.) - Bestimmung der Wirkungen auf die Reproduktion (ISO/DIS 16387:2012)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 345.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

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

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Foreword

This document (prEN ISO 16387:2012) has been prepared by Technical Committee ISO/TC 190 “Soil quality” in collaboration with Technical Committee CEN/TC 345 “Characterization of soils” the secretariat of which is held by NEN.

This document is currently submitted to the parallel Enquiry.

Endorsement notice

The text of ISO/DIS 16387:2012 has been approved by CEN as a prEN ISO 16387:2012 without any modification.

DRAFT INTERNATIONAL STANDARD ISO/DIS 16387

ISO/TC **190**/SC **4** Secretariat: **AFNOR**

Voting begins on
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Voting terminates on
2012-09-26

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Soil quality — Effects of pollutants on *Enchytraeidae* (*Enchytraeus* sp.) — Determination of effects on reproduction

Qualité du sol — Effets des polluants sur les Enchytraeidae *(*Enchytraeus *sp.) — Détermination des effets sur la survie et la reproduction*

[Revision of first edition (ISO 16387:2004)]

ICS 13.080.30

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

Member bodies are strongly encouraged to provide their comments on the draft in time for the September 2012 ISO/TC 190/SC 4/WG 11 meeting so that the group in charge of the development of this standard could work on these comments straight away, i.e. be **2012-09-08**.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 16387 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 4, *Biological methods*.

Introduction

Ecotoxicological test systems are applied to obtain information about the effects of contaminants in soil and are proposed to complement conventional chemical analysis. ISO 15799 includes a list and short characterization of recommended and standardized test systems. Aquatic test systems with soil eluate are applied to obtain information about the fraction of contaminants potentially reaching the groundwater by the water path (retention function of soils), whereas terrestrial test systems are used to assess the habitat function of soils. For the latter, a standardized test system using Enchytraeidae (a chronic test with endpoint reproduction) is proposed.

ISO 16387 describes a method that is based on the determination of acute and sublethal effects of contaminated soils to adult Enchytraeidae of the genus *Enchytraeus*. Optionally, the method may be used for testing chemicals added to standard soils (e.g. artificial soil) for their sublethal hazard potential to Enchytraeidae.

Soil-dwelling annelids of the genus *Enchytraeus* are ecologically relevant, i.e. they are abundant in many soils where earthworms are scarce, but can also reach high population densities in soils well inhabited by earthworms. Enchytraeidae can be used in laboratory tests as well as in semi-field and field studies. From a practical point of view, many *Enchytraeus* species are easy to handle and breed, and their generation time is significantly shorter than that of earthworms [the test duration for a reproduction test with Enchytraeidae is four weeks to six weeks, compared to eight weeks (12 weeks including synchronization) with earthworms]. In addition, a much smaller volume of soil is needed in the enchytraeid test compared to the amount needed in earthworm tests.

This part of ISO 16387 has been drawn up taking into consideration test procedures recommended by the Organization for Economic Cooperation and Development (see references in the Bibliography).