SLOVENSKI STANDARD
SIST EN ISO 16712:2007

01-februar-2007

Kakovost vode - Doloļ anje akutne toksiļ nosti morskih sedimentov ali sedimentov iz reļ nih ustij na rake (Amphipoda) (ISO 16712:2005)

Water quality - Determination of acute toxicity of marine or estuarine sediment to amphipods (ISO 16712:2005)

Wasserbeschaffenheit - Bestimmung der akuten Toxizität mariner Sedimente oder von Sedimenten aus Flussmündungsgebieten gegenüber Amphipoden (ISO 16712:2005)

Qualité de l'eau - Détermination de la toxicité aiguë des sédiments marins et estuariens vis-a-vis des amphipodes (ISO 16712:2005)

Ta slovenski standard je istoveten z: **EN ISO 16712:2006**

ICS:

13.060.10	Voda iz naravnih virov	Water of natural resources
13.080.30	Biološke lastnosti tal	Biological properties of soils

SIST EN ISO 16712:2007 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 16712

October 2006

ICS 13.080.30

English Version

Water quality - Determination of acute toxicity of marine or estuarine sediment to amphipods (ISO 16712:2005)

Qualité de l'eau - Détermination de la toxicité aiguë des sédiments marins et estuariens vis-à-vis des amphipodes (ISO 16712:2005)

Wasserbeschaffenheit - Bestimmung der akuten Toxizität mariner Sedimente oder von Sedimenten aus Flussmündungsgebieten gegenüber Amphipoden (ISO 16712:2005)

This European Standard was approved by CEN on 11 September 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.

CEN members are the national standards bodies of 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.

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

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Ref. No. EN ISO 16712:2006: E

Foreword

The text of ISO 16712:2005 has been prepared by Technical Committee ISO/TC 147 "Water quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 16712:2006 by Technical Committee CEN/TC 230 "Water analysis", 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 April 2007, and conflicting national standards shall be withdrawn at the latest by April 2007.

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.

Endorsement notice

The text of ISO 16712:2005 has been approved by CEN as EN ISO 16712:2006 without any modifications.

INTERNATIONAL STANDARD

ISO 16712

First edition
2005-02-15

Water quality — Determination of acute toxicity of marine or estuarine sediment to amphipods

Qualité de l'eau — Détermination de la toxicité aiguë des sédiments marins et estuariens vis-à-vis des amphipodes

Reference number
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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 16712 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 5, *Biological methods*.

Introduction

This International Standard outlines procedures for conducting acute tests for sediment toxicity, using one or more amphipod species that are found primarily below the sediment surface in coastal marine and estuarine waters. The biological endpoint for the test is percent mortality at day 10.

Water quality — Determination of acute toxicity of marine or estuarine sediment to amphipods

1 Scope

This International Standard specifies a method for the determination of acute toxicity to amphipods exposed over a period of 10 d to

a) samples of contaminated marine or estuarine sediment,

b) chemical, industrial or municipal sludge, or other solid wastes that may combine with marine or estuarine sediments, or

c) chemicals or preparations spiked into clean sediment.

2 Principle

Marine or estuarine amphipods which typically live below the sediment surface are exposed for 10 d to contaminated sediment or to sediment spiked with a test chemical. The endpoint for the test is percent mortality. The test is performed in 1-litre vessels with 175 ml of solid-phase sediment and overlying water. Salinity and temperature are dependent on the species of amphipod used in testing.

3 Test environment

3.1 Facilities

The test facility shall be well ventilated, isolated from physical disturbances and free from dust and fumes.

3.2 Lighting

All test vessels shall receive direct, overhead illumination that provides normal laboratory lighting (i.e. 500 lx to 1 000 lx) at the water surface. Illumination should be uniform and shall be continuous throughout the test period to inhibit the nocturnal migration of amphipods into the water column[39].

4 Reagents and materials

4.1 Test organism

4.1.1 General

One of the marine or estuarine sediment-dwelling amphipod species listed in Annex B should be used as test organism for the method in this International Standard. The species identification should be conducted using taxonomic keys[18] and confirmed by a qualified taxonomist familiar with identifying marine or estuarine amphipods.