

**Vee kvaliteet. *Daphnia magna* Strausi
(Cladocera, Crustacea) liikuvuse
pidurdamise määramine. Ägeda toksilisuse
test**

Water quality - Determination of the inhibition of the
mobility of *Daphnia magna* Straus (Cladocera,
Crustacea) - Acute toxicity test

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 6341:2000 sisaldab Euroopa standardi EN ISO 6341:1996+AC:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 10.05.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 6341:2000 consists of the English text of the European standard EN ISO 6341:1996+AC:1998.</p> <p>This document is endorsed on 10.05.2000 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>Standard kirjeldab meetodit keemiliste ainete, tööstusliku heitvee ja olmereovee ning pinna- või põhjavee poolt Daphnia magna Strausile avaldatava ägeda toksilisuse määramiseks</p>	<p>Scope:</p>
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ICS 13.060.70

Võtmesõnad:

ICS 07.100.20

Descriptors: Water analysis, toxicity, *Daphnia magna* Straus.

English version

Water quality

**Determination of the inhibition of the mobility of
Daphnia magna Straus (Cladocera, Crustacea)**

Acute toxicity test

(ISO 6341:1992)

Qualité de l'eau; détermination de l'inhibition de la mobilité de *Daphnia magna* Straus (Cladocera, Crustacea); essai de toxicité aiguë (ISO 6341:1996)

Wasserbeschaffenheit; Bestimmung der Hemmung der Beweglichkeit von *Daphnia magna* Straus (Cladocera, Crustacea); akuter Toxizitäts-Test (ISO 6341:1996)

This European Standard was approved by CEN on 1996-01-28 and is identical to the ISO Standard as referred to.

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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 6341:1996 Water quality; determination of the inhibition of the mobility of *Daphnia magna* Straus (Cladocera, Crustacea); acute toxicity test,

which was prepared by ISO/TC 147 'Water quality' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 230 'Water analysis' as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by October 1996 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of the International Standard ISO 6341:1996 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

1 Scope

This International Standard describes a method for the determination of the acute toxicity to *Daphnia magna* Straus (Cladocera, Crustacea) of

- a) chemical substances which are soluble under the conditions of the test, or can be maintained as a stable suspension or dispersion under the conditions of the test;
- b) industrial or sewage effluents, treated or untreated, after decantation, filtration or centrifugation if necessary;
- c) surface or ground waters.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5667-2:1991, *Water quality — Sampling — Part 2: Guidance on sampling techniques*.

ISO 5725-2:1994, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*.

ISO 5813:1983, *Water quality — Determination of dissolved oxygen — Iodometric method*.

ISO 5814:1990, *Water quality — Determination of dissolved oxygen — Electrochemical probe method*.

3 Principle

Determination of the initial concentration (that is, the concentration present at the beginning of the test) which, in 24 h, immobilizes 50 % of exposed *Daphnia magna*, under the conditions defined in this International Standard.

This concentration, known as the effective initial inhibitory concentration, is designated 24 h — EC50_i.

If possible and if necessary, the initial concentration which immobilizes 50 % of the exposed *Daphnia magna* in 48 h can also be determined. This concentration is designated 48 h — EC50_i.

An indication of the lowest concentration tested which immobilizes all the *Daphnia magna* and the highest concentration tested which does not immobilize any of the *Daphnia magna* is desirable and provides useful information in cases where the 24 h — EC50_i and, where appropriate, the 48 h — EC50_i cannot be determined.

The test is carried out in one or two stages:

- a preliminary test which determines the range of concentrations to be tested in the final toxicity test and gives an approximate value of the 24 h — EC50_i and, where appropriate, the 48 h — EC50_i;