

Water quality - Freshwater algal growth inhibition test with unicellular green algae

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 8692:2004 sisaldab Euroopa standardi EN ISO 8692:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2004 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 8692:2004 consists of the English text of the European standard EN ISO 8692:2004.</p> <p>This document is endorsed on 21.12.2004 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 International Standard specifies a method for the determination of the growth inhibition of unicellular green algae by substances and mixtures contained in water or by wastewater. This method is applicable for substances that are easily soluble in water. With modifications to this method, as described in ISO 14442 and ISO 5667-16, the inhibitory effects of poorly soluble organic and inorganic materials, volatile compounds, heavy metals and waste water can be tested. A rapid algal growth inhibition screening test for wastewater is included in Annex A.</p>	<p>Scope:</p> <p>This International Standard specifies a method for the determination of the growth inhibition of unicellular green algae by substances and mixtures contained in water or by wastewater. This method is applicable for substances that are easily soluble in water. With modifications to this method, as described in ISO 14442 and ISO 5667-16, the inhibitory effects of poorly soluble organic and inorganic materials, volatile compounds, heavy metals and waste water can be tested. A rapid algal growth inhibition screening test for wastewater is included in Annex A.</p>
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ICS 13.060.70

Võtmesõnad:

English version

Water quality

**Freshwater algal growth inhibition test with unicellular
green algae
(ISO 8692 : 2004)**

Qualité de l'eau – Essai d'inhibition de
la croissance des algues d'eau douce
avec des algues vertes unicellulaires
(ISO 8692 : 2004)

Wasserbeschaffenheit – Süßwasser-
algen-Wachstumshemmtest mit ein-
zelligen Grünalgen (ISO 8692 : 2004)

This European Standard was approved by CEN on 2004-09-13.

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.

The European Standards exist 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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 8692 : 2004 Water quality – Freshwater algal growth inhibition test with unicellular green algae, 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', the Secretariat of which is held by DIN, 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 April 2005 at the latest.

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

Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 8692 : 2004 was approved by CEN as a European Standard without any modification.

Contents

Page

Foreword.....	2
1 Scope.....	3
2 Normative references	3
3 Terms and definitions.....	3
4 Principle	4
5 Reagents and media	4
6 Apparatus.....	6
7 Procedure.....	7
8 Validity criteria	9
9 Calculation	10
10 Expression of results.....	11
11 Interpretation of results.....	11
12 Precision	11
13 Test report.....	12
Annex A (informative) Rapid screening of wastewater algal growth inhibition.....	14
Bibliography	17

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This International Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This International Standard specifies a method for the determination of the growth inhibition of unicellular green algae by substances and mixtures contained in water or by wastewater. This method is applicable for substances that are easily soluble in water.

With modifications to this method, as described in ISO 14442 and ISO 5667-16, the inhibitory effects of poorly soluble organic and inorganic materials, volatile compounds, heavy metals and waste water can be tested.

A rapid algal growth inhibition screening test for wastewater is included in Annex A.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5667-16:1998, *Water — Sampling — Part 16: Guidance on biotesting of samples*

ISO 14442:1999, *Water quality — Guidelines for algal growth inhibition tests with poorly soluble materials, volatile compounds, metals and waste water*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

cell density

x

number of cells per unit volume of medium

NOTE Cell density is expressed in cells per millilitre.

3.2

specific growth rate

μ

proportional rate of increase in cell density per unit of time:

$$\mu = \frac{1}{x} \frac{dx}{dt}$$