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NSAI Standards

Irish Standard
I.S. EN ISO 8692:2012

Water quality - Fresh water algal growth inhibition test with unicellular green algae (ISO 8692:2012)

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W **NSAI.ie**

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 8692

February 2012

ICS 13.060.70

Supersedes EN ISO 8692:2004

English Version

Water quality - Fresh water algal growth inhibition test with unicellular green algae (ISO 8692:2012)

Qualité de l'eau - Essai d'inhibition de la croissance des algues d'eau douce avec des algues vertes unicellulaires (ISO 8692:2012)

Wasserbeschaffenheit - Süßwasseralgen-Wachstumshemmtest mit einzelligen Grünalgen (ISO 8692:2012)

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Foreword

This document (EN ISO 8692:2012) has been prepared by Technical Committee ISO/TC 147 “Water quality” in collaboration with 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of an identical text or by endorsement, at the latest by August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.

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INTERNATIONAL STANDARD

ISO 8692

Third edition
2012-02-15

Water quality — Fresh water algal growth inhibition test with unicellular green algae

Qualité de l'eau — Essai d'inhibition de la croissance des algues d'eau douce avec des algues vertes unicellulaires

Reference number
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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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Foreword

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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.

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ISO 8692 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 5, *Biological methods*.

This third edition cancels and replaces the second edition (ISO 8692:2004), which has been technically revised.

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Water quality — Fresh water algal growth inhibition test with unicellular green algae

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.

IMPORTANT — It is absolutely essential that tests conducted in accordance with this International Standard be carried out by suitably qualified staff.

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 waste water. This method is applicable for substances that are easily soluble in water.

With modifications to this method, as specified 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 waste water is described in Annex A.

An alternative test procedure with algae from algal beads, with direct measurement of algal growth in spectrophotometric cells, is described in Annex B.

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.

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

ISO/TR 11044, *Water quality — Scientific and technical aspects of batch algae growth inhibition tests*

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

ISO/TS 20281, *Water quality — Guidance on statistical interpretation of ecotoxicity data*

3 Terms and definitions

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

3.1
cell density
n
number of cells per volume of medium

NOTE Cell density is expressed in cells per millilitre.

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