

This is a preview of "ISO 10253:2016". [Click here to purchase the full version from the ANSI store.](#)

Third edition  
2016-11-15

---

---

## **Water quality — Marine algal growth inhibition test with *Skeletonema* sp. and *Phaeodactylum tricornutum***

*Qualité de l'eau — Essai d'inhibition de la croissance des algues  
marines avec *Skeletonema* sp. et *Phaeodactylum tricornutum**



Reference number  
ISO 10253:2016(E)

© ISO 2016

This is a preview of "ISO 10253:2016". Click here to purchase the full version from the ANSI store.



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org

This is a preview of "ISO 10253:2016". Click here to purchase the full version from the ANSI store.

## Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>2</b>
<b>5 Materials</b> .....	<b>3</b>
5.1 Test organisms.....	3
5.2 Reagents.....	4
<b>6 Apparatus</b> .....	<b>5</b>
<b>7 Procedure</b> .....	<b>6</b>
7.1 Preparation of growth medium.....	6
7.2 Preparation of pre-culture and inoculum.....	6
7.3 Choice of test concentrations.....	6
7.4 Preparation of test substance stock solutions.....	6
7.5 Preparation of test and control batches.....	7
7.6 Incubation.....	7
7.7 Measurements.....	7
<b>8 Validity criteria</b> .....	<b>8</b>
<b>9 Interpretation of data</b> .....	<b>8</b>
9.1 Plotting growth curves.....	8
9.2 Calculation of percentage inhibition.....	8
9.3 Determination of $EC(r)_x$ .....	9
<b>10 Expression of results</b> .....	<b>9</b>
<b>11 Interpretation of results</b> .....	<b>9</b>
<b>12 Test report</b> .....	<b>9</b>
<b>Annex A (informative) Preparation of dilution series of mixtures in sea water (effluents or elutriates)</b> .....	<b>11</b>
<b>Annex B (informative) Test procedure starting from stored algal inocula, and with direct measurement of algal growth in spectrophotometric cells</b> .....	<b>12</b>
<b>Annex C (informative) Performance data</b> .....	<b>18</b>
<b>Bibliography</b> .....	<b>19</b>

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 147, *Water quality*, Subcommittee SC 5, *Biological methods*.

This third edition cancels and replaces the second edition (ISO 10253:2006), which has been technically revised.