

Water quality - Determination of soluble silicates by flow analysis (FIA and CFA) and photometric detection (ISO 16264:2002)

Water quality - Determination of soluble silicates by flow analysis (FIA and CFA) and photometric detection (ISO 16264:2002)

Wasserbeschaffenheit - Bestimmung löslicher Silicate mittels Fließanalytik (FIA und CFA) und photometrischer Detektion (ISO 16264:2002)

Qualité de l'eau - Dosage des silicates solubles par analyse en flux (FIA et CFA) et détection photométrique (ISO 16264:2002)

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Ta slovenski standard je istoveten z: EN ISO 16264:2004

ICS:

13.060.50 Ú!^ã\ æ,æ[å^Á æ^ { ã } ^ Examination of water for chemical substances
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SIST EN ISO 16264:2004

en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 16264

February 2004

ICS 13.060.50

English version

**Water quality - Determination of soluble silicates by flow analysis
(FIA and CFA) and photometric detection (ISO 16264:2002)**

Qualité de l'eau - Dosage des silicates solubles par analyse
en flux (FIA et CFA) et détection photométrique (ISO
16264:2002)

Wasserbeschaffenheit - Bestimmung löslicher Silicate
mittels Fließanalytik (FIA und CFA) und photometrischer
Detektion (ISO 16264:2002)

This European Standard was approved by CEN on 2 January 2004.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

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

EN ISO 16264:2004 (E)**Foreword**

The text of ISO 16264:2002 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 16264:2004 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 August 2004, and conflicting national standards shall be withdrawn at the latest by August 2004.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 16264:2002 has been approved by CEN as EN ISO 16264:2004 without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

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Annex ZA (normative)

Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN</u> | <u>Year</u> |
|--------------------|-------------|---|-------------|-------------|
| ISO 3696 | 1987 | Water for analytical laboratory use - Specification and test methods | EN ISO 3696 | 1995 |

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INTERNATIONAL STANDARD

ISO
16264

First edition
2002-05-15

Water quality — Determination of soluble silicates by flow analysis (FIA and CFA) and photometric detection

*Qualité de l'eau — Dosage des silicates solubles par analyse en flux (FIA
et CFA) et détection photométrique*

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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 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 16264 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 2, *Physical, chemical, biochemical methods*.

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Introduction

Further investigation will be necessary to determine whether and to what extent particular problems will require the specification of additional minor conditions.

It is absolutely essential that tests conducted according to this International Standard be carried out by suitably qualified staff.

Differentiation is required between flow injection analysis (FIA)^{[1], [2]}, and continuous flow analysis (CFA)^[3]. Both methods share the feature of an automatic dosage of the sample into a flow system (manifold) where the analytes in the sample react with the reagent solutions on their way through the manifold. The sample preparation may be integrated into the manifold. The reaction product is determined in a flow detector (e.g. photometer). This detector produces a signal from which the concentration of the parameter can be calculated.

Methods using flow analysis automate wet chemical procedures and are particularly suitable for processing many analytes in water in large sample series at a high analysis frequency.

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