

**Chemicals used for treatment of water intended for human consumption - Chlorine dioxide generated in situ**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12671:2009 sisaldab Euroopa standardi EN 12671:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 23.02.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 14.01.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12671:2009 consists of the English text of the European standard EN 12671:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 23.02.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 14.01.2009.

The standard is available from Estonian standardisation organisation.

ICS 71.100.80

Võtmesõnad:

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English Version

## Chemicals used for treatment of water intended for human consumption - Chlorine dioxide generated in situ

Produits chimiques utilisés pour le traitement de l'eau destinée à la consommation humaine - Dioxyde de chlore produit sur site

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Vor Ort erzeugtes Chlordioxid

This European Standard was approved by CEN on 29 November 2008.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This document (EN 12671:2009) has been prepared by Technical Committee CEN/TC 164 "Water supply", the secretariat of which is held by AFNOR.

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 July 2009, and conflicting national standards shall be withdrawn at the latest by July 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

Significant technical differences between this edition and EN 12671:2000 are as follows:

- a) deletion of the reference to EU Directive 80/778/EEC of July 15, 1980 in order to take into account the latest Directive in force (see [1]);

This document supersedes EN 12671:2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this document:

- 1) this document provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA;
- 2) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

NOTE Conformity with this standard does not confer or imply acceptance or approval of the product in any of the Member States of the EU or EFTA. The use of the product covered by this document is subject to regulation or control by National Authorities.

## 1 Scope

This document is applicable to chlorine dioxide generated on site for treatment of water intended for human consumption. It describes the characteristics for chlorine dioxide and specifies the composition and the corresponding test methods for chlorine dioxide. It gives information on its use in water treatment. It also determines the rules relating to safe handling and use of chlorine dioxide generated on site (see Annex B).

## 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.

EN ISO 3696:1995, *Water for analytical laboratory use – Specification and test methods (ISO 3696:1987)*

ISO 3165, *Sampling of chemical products for industrial use – Safety in sampling*

ISO 6206, *Chemical products for industrial use – Sampling – Vocabulary*

## 3 Description

### 3.1 Identification

#### 3.1.1 Chemical name

Chlorine dioxide.

#### 3.1.2 Synonym or common name

None.

#### 3.1.3 Relative molecular mass

67,46

#### 3.1.4 Empirical formula

ClO<sub>2</sub>

#### 3.1.5 Chemical formula

O=Cl=O (resonance structure)

#### 3.1.6 CAS Registry Number <sup>1)</sup>

10 049 - 04-4

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1) Chemical Abstracts Service Registry Number.