SLOVENSKI STANDARD
SIST EN 15074:2015

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Nadomešča:
SIST EN 15074:2006

Kemikalije, ki se uporabljajo za pripravo bazenske vode - Ozon

Chemicals used for treatment of swimming pool water - Ozone

Produkte zur Aufbereitung von Schwimm- und Badebeckenwasser - Ozon

Produits chimiques utilisés pour le traitement de l'eau des piscines - Ozone

Ta slovenski standard je istoveten z: **EN 15074:2014**

ICS:

13.060.25	Voda za industrijsko uporabo	Water for industrial use
71.100.80	Kemikalije za čiščenje vode	Chemicals for purification of water

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English Version

Chemicals used for treatment of swimming pool water - Ozone

Produits chimiques utilisés pour le traitement de l'eau des piscines - Ozone

Produkte zur Aufbereitung von Schwimm- und Badebeckenwasser - Ozon

This European Standard was approved by CEN on 29 September 2014.

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

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Foreword

This document (EN 15074:2014) 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of an identical text or by endorsement, at the latest by May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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.

This document supersedes EN 15074:2006.

Significant technical difference between this edition and EN 15074:2006 is as follows:

— copy of Clause 3, Description, and Clause 5, Test methods, from EN 1278:2010 [1];

— updating of Subclause 6.2 in line with current legislation.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

In respect of potential adverse effects on the quality of water for swimming pools, caused by the product covered by this European Standard:

a) this European Standard provides no information as to whether the products may be used without restriction in any of the Member States of the EU or EFTA;

b) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of these products remain in force.

NOTE 1 Conformity with the European Standard does not confer or imply acceptance or approval of the products in any of the Member States of the EU or EFTA. The use of the product covered by this European Standard is subject to regulation or control by National Authorities.

NOTE 2 Ozone is a biocide product according to the regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.

1 Scope

This European Standard is applicable to ozone used for treatment of water for swimming pools. It describes the composition of ozone. It gives information on its use in swimming pool water treatment. It also determines the rules relating to safe handling and use (see 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.

EN ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

3 Description

3.1 Identification

3.1.1 Chemical name

Ozone.

3.1.2 Synonym or common name

None (has sometimes been called improperly “allotropic oxygen”).

3.1.3 Relative molecular mass

48.

3.1.4 Empirical formula

O_3.

3.1.5 Chemical formula

O_3.

3.1.6 CAS Registry Number[1)]

10028-15-6.

3.1.7 EINECS reference[2)]

Not applicable.

3.2 Commercial form

Ozone is generated on or near the site of use.

3.3 Physical properties

3.3.1 Appearance

1) Chemical Abstracts Service Registry Number.

2) European Inventory of Existing Commercial Chemical Substances.

Bluish gas; the liquid is dark blue.

NOTE A weak absorption in the visual range between 435 nm and 475 nm.

3.3.2 Density

— Gas: 2,144 kg/m^3 at NTP (Normal Temperature Pressure, 273 K and 101,3 kPa);

— liquid: 1,574 g/ml at − 183 °C;

— solid: 1,728 g/cm^3.

3.3.3 Solubility in water

In pure water, the solubility values (S) expressed in grams per cubic meter water per (grams per cubic meter) gas at 101,3 kPa are given in Table 1.

Table 1 — Solubility in water

Temperature of water °C	Solubility S, in: $\frac{g/m^3 H_2O}{g/m^3 gas}$
0	0,64
5	0,5
10	0,39
15	0,31
20	0,24
25	0,19
30	0,15
35	0,12

NOTE 1 Recent surveys of literature data are given in Bibliography. See [2], [3] and [4].

NOTE 2 S is a ratio, not an absolute concentration.

3.3.4 Vapour pressure

The vapour pressure of ozone depending on temperature is given in Table 2.