

SLOVENSKI STANDARD

SIST EN 16400:2014

01-februar-2014

Kemikalije, ki se uporabljajo za pripravo bazenske vode - Vodikov peroksid

Chemicals used for treatment of swimming pool - Hydrogen peroxide

Produkte zur Aufbereitung von Schwimm-und badebeckenwasser - Wasserstoffperoxid

Produits chimiques utilisés pour le traitement de l'eau des piscines - Peroxyde d'hydrogène

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 16400

December 2013

ICS 71.100.80

English Version

**Chemicals used for treatment of swimming pool water -
 Hydrogen peroxide**

Produits chimiques utilisés pour le traitement de l'eau des
 piscines - Peroxyde d'hydrogène

Produkte zur Aufbereitung von Schwimm-und
 badebeckenwasser - Wasserstoffperoxid

This European Standard was approved by CEN on 26 October 2013.

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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-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN 16400:2013 (E)**Foreword**

This document (EN 16400:2013) 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of an identical text or by endorsement, at the latest by June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.

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.

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Introduction

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

- 1) this European Standard 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 European 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 European Standard is subject to regulation or control by National Authorities.

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EN 16400:2013 (E)

1 Scope

This European Standard is applicable only to hydrogen peroxide and not to mixtures with other chemicals used for treatment of swimming pool water. It describes the characteristics of hydrogen peroxide and specifies the requirements and the corresponding test methods for hydrogen peroxide. It gives information on its use in swimming 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 902, *Chemicals used for treatment of water intended for human consumption — Hydrogen peroxide*

3 Description

3.1 Identification

3.1.1 Chemical name

Hydrogen peroxide

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3.1.2 Synonym or common name

None

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3.1.3 Relative molecular mass

34,02

3.1.4 Empirical formula

H_2O_2

3.1.5 Chemical formula

H_2O_2

3.1.6 CAS Registry Number¹⁾

7722-84-1

1) Chemical Abstracts Service Registry Number.

3.1.7 EINECS reference²⁾

231-765-0

3.2 Commercial form

The product is supplied as an aqueous solution.

3.3 Physical properties

3.3.1 Appearance and odour

The product is a colourless liquid, with a slightly pungent odour.

3.3.2 Density

The density of hydrogen peroxide is given in Table 1.

Table 1 — Density

Solution concentration Mass fraction in %	Density g/ml at 20 °C
20	1,075
30	1,114
35	1,132
50	1,195
60	1,241
70	1,289

3.3.3 Solubility in water

The product is miscible with water in all proportions.

3.3.4 Vapour pressure

The vapour pressure of hydrogen peroxide depending on concentration is given in Table 2.

2) European Inventory of Existing Commercial Chemical Substances.