# Chemicals used for treatment of swimming pool water - Sodium hypochlorite

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#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 15077:2006 sisaldab Euroopa standardi EN 15077:2006 ingliskeelset teksti.

Käesolev dokument on jõustatud 30.08.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15077:2006 consists of the English text of the European standard EN 15077:2006.

This document is endorsed on 30.08.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard is applicable to sodium hypochlorite used directly, or for the production of formulations for treating swimming pool water. It describes the characteristics of sodium hypochlorite and specifies the requirements and the corresponding test methods for sodium hypochlorite. It gives information on its use for treating swimming pool water and determines the rules relating to safe handling and use of sodium hypochlorite (see Annex B).

#### Scope:

This European Standard is applicable to sodium hypochlorite used directly, or for the production of formulations for treating swimming pool water. It describes the characteristics of sodium hypochlorite and specifies the requirements and the corresponding test methods for sodium hypochlorite. It gives information on its use for treating swimming pool water and determines the rules relating to safe handling and use of sodium hypochlorite (see Annex B).

ICS 71.100.80

Võtmesõnad:

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English Version**

## Chemicals used for treatment of swimming pool water - Sodium hypochlorite

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

Produkte zur Aufbereitung von Schwimm-und Badebeckenwasser - Natriumhypochlorit

This European Standard was approved by CEN on 5 June 2006.

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



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

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#### **Foreword**

This document (EN 15077:2006) 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 January 2007, and conflicting national standards shall be withdrawn at the latest by January 2007.

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, or tis about the work of the state of the st Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

#### Introduction

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

- a) 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;
- 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 this product remain in force.

NOTE Conformity with the 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 IS DOCULON ORNORADE DE LA LEGA DE LEGA regulation or control by National Authorities.

#### 1 Scope

This European Standard is applicable to sodium hypochlorite used directly, or for the production of formulations for treating swimming pool water. It describes the characteristics of sodium hypochlorite and specifies the requirements and the corresponding test methods for sodium hypochlorite. It gives information on its use for treating swimming pool water and determines the rules relating to safe handling and use of sodium hypochlorite (see Annex B).

#### 2 Normative reference

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 901, Chemicals used for the treatment of water intended for human consumption — Sodium hypochlorite

#### 3 Description

The identification, the commercial form, the physical properties and the chemical properties are given in the relevant sub-clauses of EN 901.

#### 4 Purity criteria

#### 4.1 General

This European Standard specifies the minimum purity requirements for sodium hypochlorite used for the treating swimming pool water. Limits are given for impurities commonly present in the product and depending on the raw material and the manufacturing process, other impurities may be present and if so, the user and when necessary, the relevant authorities shall be notified.

NOTE Users of this product should check national regulations in order to clarify whether it is of appropriate purity for treatment of water for swimming pools, taking into account water quality, required dosage, and contents of other impurities and additives used in the product not stated in the product standard.

Limits have been given for impurities and trace elements where these are likely to be present in significant quantities from the current production process and raw materials. If the production process or raw materials lead to significant quantities of other impure by-products or additives being present, the user shall be notified.

#### 4.2 Composition of commercial product

Sodium hypochlorite is available as a solution with a concentration up to 160 g of available chlorine per litre (equivalent to mass fraction of 13,5 %) at the time of delivery by the producer as calculated in accordance with the corresponding method given in EN 901. The concentration of sodium hypochlorite shall be equal to or greater than the value specified by the manufacturer.

#### 4.3 Impurities and main by-products

The content of sodium chlorate (NaClO<sub>3</sub>) and sodium bromate (NaBrO<sub>3</sub>) for each type of product shall conform to the requirements specified in EN 901 The product shall be visibly free from deposits or suspended matter.