Chemicals used for treatment of swimming pool water - Calcium hypochlorite



FESTI STANDARDI FESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15796:2010 sisaldab Euroopa standardi EN 15796:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.03.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 20.01.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15796:2010 consists of the English text of the European standard EN 15796:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.03.2010 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 20.01.2010.

The standard is available from Estonian standardisation organisation.

ICS 71.100.80

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE

EN 15796

EUROPÄISCHE NORM

January 2010

ICS 71.100.80

English Version

Chemicals used for treatment of swimming pool water - Calcium hypochlorite

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

Produkte zur Aufbereitung von Schwimm-und Badebeckenwasser - Calciumhypochlorit

This European Standard was approved by CEN on 4 December 2009.

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, Croatia, 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

Management Centre: Avenue Marnix 17, B-1000 Brussels

JIII	lents	Page
(ew	ord	3
		4
		5
		5
		5
1 2 3 4	Purity criteria General Composition of commercial product Impurities and main by-products Chemical parameters	
	Test methods	6
1 2 3 4 5	Means of deliveryRisk and safety labelling according to the Transportation regulations and labelling Marking	6 6 6 6 6 7 7 7 8
1 2	OriginUse	alcium hypochlorite9 9
nnex 1 2	Rules for safe handling and use	afety
	• • •	12

Foreword

This document (EN 15796:2010) 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 2010, and conflicting national standards shall be withdrawn at the latest by July 2010.

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.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, S Jon. Sweden, Switzerland 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 standard:

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

1 Scope

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

2 Normative reference

The following referenced document is 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 900, Chemicals used for treatment of water intended for human consumption — Calcium hypochlorite

3 Description

For the identification, the commercial form, the physical properties and the chemical properties see the relevant subclauses of EN 900.

4 Purity criteria

4.1 General

This European Standard specifies the minimum purity requirements for calcium hypochlorite used for the treatment of water for swimming pools. Limits are given for impurities commonly present in the product. Depending on the raw material and the manufacturing process other impurities may be present and, if so, this shall be notified to the user and when necessary to relevant authorities.

NOTE Users of the 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 chemical parameters 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 impurities, by-products or additives being present, this shall be notified to the user.

4.2 Composition of commercial product

Calcium hypochlorite is available in powder, granular or tablet form with a minimum concentration of mass fraction 65,5 % calcium hypochlorite (Ca(ClO)₂) (equivalent to an available active chlorine content in mass fraction of at least 65 %) at the time of delivery by the producer. The concentration of calcium hypochlorite shall be equal to or greater than the value specified by the manufacturer.

Dissolution quality, calculated as available chlorine which is obtainable within 1 min after dissolution in water, shall not be less than a mass fraction of 45.5 %.

4.3 Impurities and main by-products

The content of impurities and water-insoluble matter shall conform to the requirements specified in EN 900.