Chemicals used for treatment of water intended for human consumption - Calcium carbonate



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 1018:2013+A1:2015 sisaldab Euroopa standardi EN 1018:2013+A1:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 1018:2013+A1:2015 consists of the English text of the European standard EN 1018:2013+A1:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.03.2015.	Date of Availability of the European standard is 11.03.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 71.100.80

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

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

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

The right to reproduce and distribute 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 a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1018:2013+A1

March 2015

ICS 71.100.80

Supersedes EN 1018:2013

English Version

Chemicals used for treatment of water intended for human consumption - Calcium carbonate

Produits chimiques utilisés pour le traitement de l'eau destinée à la consommation humaine - Carbonate de calcium

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Calciumcarbonat

This European Standard was approved by CEN on 28 March 2013 and includes Amendment 1 approved by CEN on 5 January 2015.

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-CENELEC 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-CENELEC 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, 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 United Kingdom.



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

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

Contents

Toreword	
Scope	
Scope	
Normative references Terms and definitions Description 1 Identification 2 Commercial form 3 Physical properties 4 Chemical properties Purity criteria 1 General 2 Composition of commercial product 3 Impurities and main by-products 4 ① Chemical parameters ② Test methods 1 Sampling 2 Analyses Labelling - Transportation - Storage Labelling according to the EU legislation 3 Transportation regulations and labelling 4 Marking 5 Storage Annex A (informative) General information on calcium carbonate Annex B (normative) Sample preparation and testing of specific surface of calcium carbonate	
Terms and definitions Description I Identification Physical properties Chemical properties Chemical properties Purity criteria Composition of commercial product Impurities and main by-products Amy Chemical parameters Amy Test methods Analyses Labelling - Transportation - Storage Means of delivery Labelling according to the EU legislation Transportation regulations and labelling Marking Marking Storage Annex A (informative) General information on calcium carbonate Annex B (normative) Sample preparation and testing of specific surface of calcium carbonate	
Description	
Identification	_
Commercial form Physical properties Purity criteria Composition of commercial product Impurities and main by-products Composition of commercial products Composition of	
Physical properties Chemical properties Purity criteria Composition of commercial product Impurities and main by-products Ampling Analyses Labelling - Transportation - Storage Amalyses Labelling according to the EU legislation Transportation regulations and labelling Marking Marking Storage Annex A (informative) General information on calcium carbonate Annex B (normative) Sample preparation and testing of specific surface of calcium carbonate	
Purity criteria Purity criteria Composition of commercial product Impurities and main by-products Fest methods Analyses Labelling - Transportation - Storage Analyses Labelling according to the EU legislation Transportation regulations and labelling Marking Marking Mannex A (informative) General information on calcium carbonate Annex B (normative) Sample preparation and testing of specific surface of calcium carbonate	
.1 General	
1 General	7
2 Composition of commercial product 3 Impurities and main by-products 4 A Chemical parameters A Chemical param	
Test methods	
Test methods	8
Analyses Labelling - Transportation - Storage 1 Means of delivery 2 Labelling according to the EU legislation 3 Transportation regulations and labelling 4 Marking 5 Storage Innex A (informative) General information on calcium carbonate Innex B (normative) Sample preparation and testing of specific surface of calcium carbonate	
Labelling - Transportation - Storage 1 Means of delivery 2 Labelling according to the EU legislation 3 Transportation regulations and labelling 4 Marking 5 Storage 2 Storage 3 Innex A (informative) General information on calcium carbonate 5 Innex B (normative) Sample preparation and testing of specific surface of calcium carbonate	8
Labelling - Transportation - Storage	8
.1 Means of delivery	
.2 Labelling according to the EU legislation	9
.3 Transportation regulations and labelling	
.4 Marking	9
.5 Storage Annex A (informative) General information on calcium carbonate	9
Annex A (informative) General information on calcium carbonate	
nnex B (normative) Sample preparation and testing of specific surface of calcium carbo	
, , , , , , , , , , , , , , , , , , , ,	
ibliography	
	13

Foreword

This document (EN 1018:2013+A1:2015) 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 September 2015, and conflicting national standards shall be withdrawn at the latest by September 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 [A] EN 1018:2013 [A].

This document includes Amendment 1 approved by CEN on 2015-01-04.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] (A)

Significant differences between this edition and EN 1018:2006 are:

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

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 Yugosiav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Iteland, 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 intended for human consumption, 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;
- 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.

gal.

sument do.
The use of t. NOTE Conformity with this document 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.

Scope

This European Standard is applicable to calcium carbonate used for treatment of water intended for human consumption. It describes the characteristics of calcium carbonate and specifies the requirements and the corresponding test methods for calcium carbonate. It gives information on its use in water treatment.

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 12485, Chemicals used for treatment of water intended for human consumption — Calcium carbonate, high-calcium lime, half-burnt dolomite, magnesium oxide and calcium magnesium carbonate — Test methods

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

ISO 6206, Chemical products for industrial use — Sampling — Vocabulary

ISO 9277, Determination of the specific surface area of solids by gas adsorption — BET method

Terms and definitions

a Calc To distinguish between non-porous and porous calcium carbonate, Annex B applies.

Description

4.1 Identification

Chemical name 4.1.1

Limestone.

Calcium carbonate.

4.1.2 Synonym or common name

Limestone.

Calcium carbonate.

4.1.3 Relative molecular mass

100.09.

Empirical formula 4.1.4

CaCO₃.

Chemical formula 4.1.5

CaCO₃.