SLOVENSKI STANDARD
SIST EN 14368:2015

01-junij-2015

Nadomešča:
SIST EN 14368:2004

Proizvodi za pripravo pitne vode - Apnenec, prevlečen z manganovim dioksidom

Products used for treatment of water intended for human consumption - Manganese dioxide coated limestone

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Mit Mangandioxid beschichteter Kalkstein

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

Ta slovenski standard je istoveten z: EN 14368:2015

ICS:

13.060.20	Pitna voda	Drinking water
71.100.80	Kemikalije za čiščenje vode	Chemicals for purification of water

SIST EN 14368:2015 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14368

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ICS 71.100.80

Supersedes EN 14368:2003

English Version

Products used for treatment of water intended for human consumption - Manganese dioxide coated limestone

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

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Mit Mangandioxid beschichteter Kalkstein

This European Standard was approved by CEN on 12 March 2015.

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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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Contents

Foreword

This document (EN 14368:2015) 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of an identical text or by endorsement, at the latest by October 2015, and conflicting national standards shall be withdrawn at the latest by October 2015.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 14368:2003.

The main technical difference between this edition and EN 14368:2003 is the updating of 9.2 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 intended for human consumption, 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 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 manganese dioxide coated limestone used for treatment of water intended for human consumption. It describes the characteristics of manganese dioxide coated limestone and specifies the requirements and the corresponding test methods for manganese dioxide coated limestone. 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 1018, *Chemicals used for treatment of water intended for human consumption — Calcium carbonate*

EN 12901:1999, *Products used for treatment of water intended for human consumption — Inorganic supporting and filtering materials — Definitions*

EN 12902, *Products used for treatment of water intended for human consumption — Inorganic supporting and filtering materials — Methods of test*

EN 13752, *Products used for treatment of water intended for human consumption — Manganese dioxide*

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

ISO 6333, *Water quality — Determination of manganese — Formaldoxime spectrometric method*

3 Terms, definitions and symbols

For the purposes of this document, the terms, definitions and symbols given in EN 12901:1999 apply.

4 Description

4.1 Identification

4.1.1 Chemical name

Manganese dioxide on limestone support material.

4.1.2 Synonyms or common names

Manganese (IV) oxide, pyrolusite on limestone support material.

4.1.3 Chemical formula

MnO_2 and $CaCO_3$.

4.1.4 CAS Registry number[1)]

Manganese dioxide: 1313-13-9.

Calcium carbonate: 471-34-1.

4.1.5 EINECS reference[2)]

Manganese dioxide: 215-202-6.

Calcium carbonate: 207-439-9.

4.2 Commercial form

Manganese dioxide coated limestone is a granular material available in different particle size ranges.

5 Physical properties

5.1 Appearance

The product is a granular material varying in colour from dark grey to black.

The product shall be generally homogeneous and shall be visibly free of extraneous matter.

5.2 Particle size distribution

The particle size distribution shall be described by either:

a)

— effective size: (d_{10}) with a maximum deviation of ± 5 %;

— uniformity coefficient: (U) less than 2,0;

— minimum size: (d_1) with a maximum deviation of ± 5 %.

or

b) particle size range and mass fraction of oversize and undersize particles according to application.

The maximum contents of oversize and undersize shall be a mass fraction of 5 % for the application of the product in multimedia filters and a mass fraction of 10 % for use in single media filters. See A.2.3 for examples of available particle sizes that are used.

NOTE 1 The particle size can decrease during transportation and handling.

NOTE 2 Other values can be necessary for certain applications.

5.3 Density

5.3.1 Bulk density loose

The bulk density loose shall be in the range of 1 500 kg/m^3 to 1 700 kg/m^3.

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1) Chemical Abstracts Service Registry Number.

2) European Inventory of Existing Commercial Chemical Substances.