Chemicals used for treatment of water intended for human consumption - Iron (III) chloride

Chemicals used for treatment of water intended for human consumption - Iron (III) chloride



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 888:2005 sisaldab Euroopa standardi EN 888:2004 ingliskeelset teksti.

Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 888:2005 consists of the English text of the European standard EN 888:2004.

This document is endorsed on 25.01.2005 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 document is applicable to iron (III) chloride (a), iron (III) chloride hexahydrate (b), iron (III) chloride solution (c) used for treatment of water intended for human consumption. It describes the characteristics and specifies the requirements and the corresponding analytical methods for iron (III) chlorides (a), (b) and © (analytical methods are given in Annex B) and gives information for their use in water treatment.

Scope:

This document is applicable to iron (III) chloride (a), iron (III) chloride hexahydrate (b), iron (III) chloride solution (c) used for treatment of water intended for human consumption. It describes the characteristics and specifies the requirements and the corresponding analytical methods for iron (III) chlorides (a), (b) and © (analytical methods are given in Annex B) and gives information for their use in water treatment.

ICS 71.100.80

Võtmesõnad:

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 888

November 2004

ICS 71.100.80

Supersedes EN 888:1998

English version

Chemicals used for treatment of water intended for human consumption - Iron (III) chloride

Produits chimiques utilisés pour le traitement de l'eau destinée à la consommation humaine - Chlorure de fer (III)

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Eisen(III)chlorid

This European Standard was approved by CEN on 30 September 2004.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

1 Scope	ntroduction		0,	Page
Normative references	Scope			
Normative references	Purity criteria	Introdu		
Description 5 Purity criteria 8 Description 5 Description 5 Description 5 Description 5 Description 6 Description 7 Description	Description	1	Scope	5
Purity criteria 8 Test methods 10 Labelling – Transportation – Storage 13 Annex A (informative) General information on iron (III) chloride 15 Annex B (normative) Analytical methods 19 Annex C (informative) Reduction of Fe (III) on a silver column 34 Annex D (informative) Determination of cadmium, chromium, nickel and lead (inductively coupled plasma optical emission spectrometry (ICP/OES)) 35 Bibliography 37	B. Purity criteria	2		
Test methods	Test methods	3	Description	5
Labelling – Transportation – Storage	Labelling – Transportation – Storage	4		
Annex A (informative) General information on iron (III) chloride	Annex A (informative) General information on iron (illi) chloride	5		
Annex B (normative) Analytical methods	Annex B (normative) Analytical methods	6	Labelling – Transportation – Storage	13
Annex C (informative) Reduction of Fe (III) on a silver column	Annex C (informative) Reduction of Fe (III) on a silver column			
Annex D (informative) Determination of cadmium, chromium, nickel and lead (inductively coupled plasma optical emission spectrometry (ICP/OES))	Annex D (informative) Determination of cadmium, chromium, nickel and lead (inductively coupled plasma optical emission spectrometry (ICP/OES))			
coupled plasma optical emission spectrometry (ICP/OES))	coupled plasma optical emission spectrometry (ICP/OES))			
	Tien of the state		coupled plasma optical emission spectrometry (ICP/OES))	35
Tion of the second seco		Bibliog	raphy	37
2	4	2		

Foreword

This document (EN 888:2004) 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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

This document supersedes EN 888:1998.

Significant technical differences between this edition and EN 888:1998 are as follows:

- a) replacement of the reference to EU Directive 80/778 of 15 July 1980 with the latest Directive in force (see[1]);
- b) expansion of annex A by addition of A.2 "Quality of commercial product";
- c) deletion of annex E.

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, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and 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 document:

- This document 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.

Conformity with this standard does not confer or imply acceptance or approval of the product in any of the NOTE Service October Octobe 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.

1 Scope

This document is applicable to iron (III) chloride (a), iron (III) chloride hexahydrate (b), iron (III) chloride solution (c) used for treatment of water intended for human consumption. It describes the characteristics and specifies the requirements and the corresponding analytical methods for iron (III) chlorides (a), (b) and (c) (analytical methods are given in Annex B) and gives information for their use in water treatment.

Normative references

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 ISO 3696, Water for analytical laboratory use - Specification and test methods (ISO 3696:1987).

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

ISO 5790: 1979, Inorganic chemical products for industrial use - General method for the determination of chloride content- Mercurimetric method

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

ISO 8213, Chemical products for industrial use - Sampling techniques - Solid chemical products in the form St. of particles varying from powders to coarse lumps

Description 3

3.1 Identification

3.1.1 Chemical name

- (a) iron (III) chloride (FeCl₃).
- (b) iron (III) chloride hexahydrate (FeCl₃ . 6 H₂O).
- (c) iron (III) chloride solution.

3.1.2 Synonym or common names

- (a) Ferric chloride, water free ferric chloride.
- (b) Ferric chloride hexahydrate.
- (c) Ferric chloride solution.

3.1.3 Relative molecular mass

- (a) 162,21.for FeCl₃
- (b) 270,31.for FeCl₃ . 6 H₂O