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

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



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN	This Estonian standard EVS-EN 891:2005
891:2005 sisaldab Euroopa standardi EN	consists of the English text of the
891:2004 ingliskeelset teksti.	European standard EN 891:2004.
Käesolev dokument on jõustatud	This document is endorsed on 25.01.2005
25.01.2005 ja selle kohta on avaldatud	with the notification being published in the
teade Eesti standardiorganisatsiooni	official publication of the Estonian national
ametlikus väljaandes.	standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.
<i>.</i>	

Käsitlusala:	Scope:
This European Standard is applicable to	This European Standard is applicable to
iron(III) chloride sulfate used for treatment	iron(III) chloride sulfate used for treatment
of water intended for human consumption.	of water intended for human consumption.
It describes the characteristics of iron(III)	It describes the characteristics of iron(III)
sulfate and specifies the requirements	sulfate and specifies the requirements
and the corresponding analytical methods	and the corresponding analytical methods
for iron(III) chloride sulfate and gives	for iron(III) chloride sulfate and gives
information on its use in water treatment	information on its use in water treatment
ICS 71.100.80 Võtmesõnad:	

## **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 891

November 2004

ICS 71.100.80

Supersedes EN 891:1998

English version

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

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

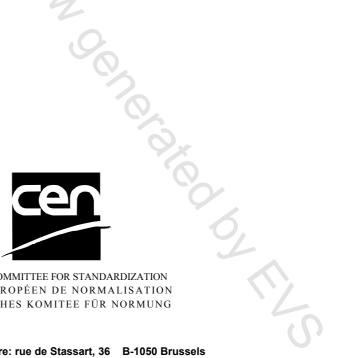
Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Eisen (III) chloridsulfat

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

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## Foreword

This document (EN 891:2004) 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 891:1998.

Significant technical differences between this edition and EN 891:1998 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 F.

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.

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## Introduction

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this document:

- a) 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 Member NOTE is proving on one proving the 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 sulfate used for treatment of water intended for human consumption. It describes the characteristics of iron (III) sulfate and specifies the requirements and the corresponding analytical methods for iron (III) chloride sulfate (analytical methods are given in Annex B) and gives information on its use in water treatment. It also determines the rules relating to safe handling and use of iron (III) chloride sulfate (see annex E).

#### 2 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 determination of chloride content - Mercurimetric method.

J-I TOERAS. ISO 6206, Chemical products for industrial use - Sampling – Vocabulary.

#### 3 Description

#### 3.1 Identification

## 3.1.1 Chemical name

Iron (III) chloride sulfate.

## 3.1.2 Synonym or common names

Ferric chloride sulfate, ferric chloro sulfate, chlorinated copperas.

## 3.1.3 Relative molecular mass

187,36.

## 3.1.4 Empirical formula

FeCISO<sub>4</sub>.

## 3.1.5 Chemical formula

FeCISO₄.