

**Chemicals used for treatment of water
intended for human consumption -
Copper sulfate**

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human consumption - Copper sulfate

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12386:2005 sisaldab Euroopa standardi EN 12386:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.08.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12386:2005 consists of the English text of the European standard EN 12386:2005.</p> <p>This document is endorsed on 29.08.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard is applicable to copper (II) sulfate pentahydrate used for treatment of water intended for human consumption.</p>	<p>Scope: This European Standard is applicable to copper (II) sulfate pentahydrate used for treatment of water intended for human consumption.</p>
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Võtmesõnad: chemical products, chemical properties, cobber sulfates, conditioning, description, impurities, labelling, marking, physical properties, potable water, storage, tests, toxic substances, water treatment

English version

Chemicals used for treatment of water intended for human consumption - Copper sulfate

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

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Kupfersulfat

This European Standard was approved by CEN on 12 May 2005.

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.

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Foreword

This European Standard (EN 12386:2005) 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 December 2005, and conflicting national standards shall be withdrawn at the latest by December 2005.

This document supersedes EN 12386:1998.

Significant technical differences between this edition and EN 12386:1998 are as follows:

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

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 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 European 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 copper (II) sulfate pentahydrate used for treatment of water intended for human consumption. It describes the characteristics and specifies the requirements of copper (II) sulfate pentahydrate and refers to the corresponding analytical methods. It gives information for its use in water treatment. It also determines the rules relating to safe handling and use of copper (II) sulfate pentahydrate (see Annex B).

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 reference 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 4793, *Laboratory sintered (fritted) filters - Porosity grading, classification and designation*

ISO 5993, *Sodium hydroxide for industrial use - Determination of mercury content - flameless atomic absorption spectrometric method*

ISO 6206, *Chemical products for industrial use – Sampling – Vocabulary*

ISO 6332, *Water quality - Determination of iron - Spectrometric method using 1,10-phenanthroline*

ISO 6353-1, *Reagents for chemical analysis - Part 1 General test methods*

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

3 Description

3.1 Identification

3.1.1 Chemical name

Copper (II) sulfate pentahydrate.

3.1.2 Synonym or common names

Copper vitriol, blue vitriol, cupric sulfate.

3.1.3 Relative molecular mass

For pentahydrate: 249,69.

3.1.4 Empirical formula

$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$.