



**SLOVENSKI STANDARD**  
**oSIST prEN 16038:2010**  
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**Kemikalije, ki se uporabljajo za pripravo vode v bazenih - Natrijev hidrogen sulfat**

Chemicals used for treatment of water for swimming pools - Sodium hydrogen sulfate

Produkte zur Aufbereitung von Schwimm- und Badebeckenwasser -  
Natriumhydrogensulfat

Produits chimiques utilisés pour le traitement de l'eau des piscines - Hydrogénosulfate  
de sodium

**Ta slovenski standard je istoveten z: prEN 16038**

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**DRAFT**  
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ICS 71.100.80

English Version

## Chemicals used for treatment of water for swimming pools - Sodium hydrogen sulfate

Produits chimiques utilisés pour le traitement de l'eau des  
piscines - Hydrogénosulfate de sodium

Produkte zur Aufbereitung von Schwimm- und  
Badebeckenwasser - Natriumhydrogensulfat

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If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>		<b>Page</b>
Foreword.....		3
Introduction .....		4
1	Scope .....	5
2	Normative references .....	5
3	Description .....	5
4	Purity criteria.....	5
5	Test methods.....	6
6	Labelling – Transportation – Storage .....	6
Annex A (informative) General information on sodium hydrogen sulfate.....		9
Annex B (normative) General rules relating to safety.....		11
Bibliography .....		12

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## Foreword

This document (prEN 16038:2010) has been prepared by Technical Committee CEN/TC 164 "Water supply", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

Note : As this standard will not be published before end 2010, chapter 6.2 takes into account the new Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

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## Introduction

In respect of potential adverse effects on the quality of water for swimming pools , 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.

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## 1 Scope

This European Standard is applicable to sodium hydrogen sulfate used for treatment of swimming pool water . It describes the characteristics of sodium hydrogen sulfate and specifies the requirements and the corresponding test methods for sodium hydrogen sulfate. It gives information on its use in water treatment for swimming pools.

## 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.

WI 00164433, Chemicals used for treatment of water intended for human consumption – sodium hydrogen sulfate.

## 3 Description

The identification, the commercial form, the physical properties and the chemical properties are given in the relevant sub-clauses of WI 00164433.

## 4 Purity criteria

### 4.1 General

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This European Standard specifies the minimum purity requirements for sodium hydrogen sulfate used for the treatment of water for swimming pools . Limits are given for impurities commonly present in the product. Depending on the raw material and the manufacturing process other impurities may be present and, if so, this shall be notified to the user and when necessary to the relevant authorities.

**NOTE** Users of this product should check the national regulations in order to clarify whether it is of appropriate purity for treatment of water for swimming pools , taking into account raw water quality, required dosage, contents of other impurities and additives used in the product not stated in the product standard.

Limits have been given for impurities and chemicals parameters where these are likely to be present in significant quantities from the current production process and raw materials. If the production process or raw materials leads to significant quantities of impurities, by-products or additives being present, this shall be notified to the user.

### 4.2 Composition of commercial product

The commercial product shall contain a mass fraction of sodium hydrogen sulfate greater than 92 per cent.

### 4.3 Impurities and by-products

The content of impurities and by-products shall be in accordance with Table 1.

Table 1 — Impurities and by-products

Parameter	Limit in % (m/m)
Sodium Sulfate max.	8
Water max.	0.8
Water insoluble substances max.	0.05
Iron max.	0.01

#### 4.4 Chemical Parameters

The product shall conform to the requirements specified in Table 2.

Table 2 — Chemical parameters

Parameter	Limit in mg/kg NaHSO <sub>4</sub>
Arsenic (As) max.	0,1
Cadmium (Cd) max.	0,1
Chromium (Cr) max.	1
Mercury (Hg) max.	0,1
Nickel (Ni) max.	1
Lead (Pb) max.	1
Antimony (Sb) max.	1
Selenium (Se) max.	1
NOTE Pesticides, polycyclic aromatic hydrocarbons and halogenated organic substances are not by-products of the manufacturing process.	

#### 5 Test methods

The sampling and the analytical methods are those described in WI 00164433.

#### 6 Labelling – Transportation – Storage

##### 6.1 Means of delivery

Sodium hydrogen sulfate shall be delivered in polyethylene bags, with net contents of 25 kg, or in flexible bulk containers, with net contents of max. 1 000 kg.

In order that the purity of the product is not affected, the means of delivery shall not have been used previously for any different product or it shall have been specially cleaned and prepared before use.



## 6.2 Risk and safety labelling according to the EU Regulation<sup>1)</sup>

At the date of publication of this standard, the following labelling requirements shall apply to sodium hydrogen sulfate:

— Pictogram and signal word:

GHS05 :Danger

— Hazard statements:

H318: Causes serious eye damage

— Precautionary statements:

P102: Keep out of reach of children.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

NOTE The regulation [1] contains a list of substances classified by the EU. Substances not listed in this regulation should be classified on the basis of their intrinsic properties according to the criteria in the regulation by the person responsible for the marketing of the substance.

SIST EN 16038:2012

## 6.3 Transportation regulations and labelling

At the date of publication of the standard, Sodium hydrogen sulfate is not listed as UN Number<sup>2)</sup> and not classified by the manufacturers as a dangerous good according to the transport regulations RID<sup>3)</sup>, ADR<sup>4)</sup>, IMDG<sup>5)</sup> and IATA<sup>6)</sup>.

## 6.4 Marking

The marking shall include the following:

— the name: “sodium hydrogen sulfate”, trade name and grade;

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<sup>1</sup> See [2].

<sup>2</sup> United Nations Number.

<sup>3</sup> Regulations concerning the International Carriage of Dangerous Goods by Rail.

<sup>4</sup> European Agreement concerning the International Carriage of Dangerous Goods by Road.

<sup>5</sup> International Maritime Transport of Dangerous Goods Code.

<sup>6</sup> International Air Transport Association. Dangerous Goods Regulations

**prEN 16038:2010 (E)**

- the net mass;
- the name and address of supplier and/or manufacturer;
- the statement “This product conforms to EN XXX, type ...”.

**6.5 Storage****6.5.1 General**

Store the product in original packages or in tightly closed plastic containers in a cool and dry place. Do not use containers made of common construction metals (mild steel, stainless steel, zinc coated steel, etc.). Keep away from any sources of heat (avoid heat of > 60 °C to prevent agglomeration) or incompatible materials.

**6.5.2 Long term stability**

Stable when stored under conditions described in 6.5.1.

**6.5.3 Storage incompatibilities**

Avoid contact with alkaline substances (intense reaction). Avoid contact with common construction metals (corrosion, release of highly flammable hydrogen gas).

Avoid mixtures with hypochlorites and other compounds containing active chlorine (intense reaction, release of toxic chlorine gas).

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