



SLOVENSKI STANDARD

SIST EN 15514:2008

01-januar-2008

Kemikalije, ki se uporabljajo za pripravo bazenske vode - Klorovodikova kislina

Chemicals used for treatment of swimming pool water - Hydrochloric acid

Produkte zur Aufbereitung von Schwimm- und Badebeckenwasser - Salzsäure

Produits chimiques utilisés pour le traitement de l'eau des piscines - Acide chlorhydrique

Ta slovenski standard je istoveten z: EN 15514:2007

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ICS:

13.060.25	Voda za industrijsko uporabo	Water for industrial use
71.100.80	Kemikalije za čiščenje vode	Chemicals for purification of water

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 15514

October 2007

ICS 71.100.80

English Version

Chemicals used for treatment of swimming pool water - Hydrochloric acid

Produits chimiques utilisés pour le traitement de l'eau des
piscines - Acide chlorhydrique

Produkte zur Aufbereitung von Schwimm- und
Badebeckenwasser - Salzsäure

This European Standard was approved by CEN on 16 September 2007.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 15514:2007) 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of an identical text or by endorsement, at the latest by April 2008, and conflicting national standards shall be withdrawn at the latest by April 2008.

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.

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Introduction

In respect of potential adverse effects on the quality of swimming pool water, 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 hydrochloric acid used for the treatment of swimming pool water. It describes the characteristics of hydrochloric acid and specifies the requirements and the corresponding test methods for hydrochloric acid. It gives information on its use in swimming pool water treatment. It also determines the rules relating to safe handling and use of hydrochloric acid (see Annex B).

2 Normative references

The following referenced document is 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 939, *Chemicals used for treatment of water intended for human consumption - Hydrochloric acid*

3 Description

For the identification, commercial form, physical properties and the chemical properties see EN 939.

4 Purity criteria

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4.1 General

This European Standard specifies the minimum purity requirements for hydrochloric acid used for the treatment of swimming pool water. 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 relevant authorities.

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

Limits have been given for impurities and chemical 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 lead to significant quantities of other impurities, by-products or additives being present, this shall be notified to the user.

4.2 Composition of commercial product

For the product as concentrated acid the concentration of hydrochloric acid solution shall be at least at mass fraction of 25 %.

More diluted solutions are commercially available, the concentration of hydrochloric acid shall be equal to or greater than the manufacturer specified value.

4.3 Impurities and main by-products

The content of iron and halogenated organic compounds (as Cl) shall conform to the requirements specified in EN 939.

EN 15514:2007 (E)**4.4 Chemical parameters**

The content of arsenic, cadmium, chromium, mercury, nickel, lead, antimony and selenium for each type of product shall conform to the requirements specified in EN 939.

NOTE Pesticides and polycyclic aromatic hydrocarbons are not relevant in hydrochloric acid. Cyanide which does not exist in a very acidic media, such as hydrochloric acid, is not a relevant chemical parameter.

5 Test methods

The methods for sampling and analysis are those specified in EN 939.

6 Labelling - Transportation - Storage**6.1 Means of delivery**

The product shall be delivered in vessels used solely for that purpose of capacity appropriate to the application (varying from 25 kg carboys to 25 t bulk containers).

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 Directives (67/548/EEC)

The following labelling requirements shall apply to hydrochloric acid with more than a mass fraction of 25 % at the date of the publication of this European Standard.

[SIST EN 15514:2008](#)

Symbols and indications of danger [standards.iteh.ai/catalog/standards/sist/52b1a116-4fee-4c86-b082-7c2010c4c69f/sist-en-15514-2008](#)

C : Corrosive

Nature of special risks attributed to dangerous substances:

R 34 : Causes burns;

R 37 : Irritating to respiratory system.

Safety advice concerning dangerous substances:

S 2 : Keep out of the reach of children;

S 26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice;

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection;

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible);

S 46: If swallowed, seek medical advice immediately and show this container or label.

6.3 Transportation regulations and labelling

Hydrochloric acid is listed as UN Number ¹⁾ 1789.

RID ²⁾ ADR ³⁾ : class 8, classification code C1, packing group II or III.

IMDG ⁴⁾ : class 8, packing group II or III.

IATA ⁵⁾ : class 8.

6.4 Marking

The marking shall include the following:

- name "hydrochloric acid", trade name , grade and type;
- net mass;
- name and address of supplier and/or manufacturer;
- statement "this product conforms to EN 15514".

6.5 Storage

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6.5.1 General

The product shall be stored in tightly-closed containers made of rubber-lined steel, polyvinyl chloride, polyethylene, polypropylene, glass, stoneware or polytetrafluorethylene, or glass-reinforced plastics providing the resin is not attacked by hydrochloric acid in a cool, well ventilated place.

6.5.2 Long term stability

The product is stable.

6.5.3 Storage incompatibilities

The product and its vapour shall not be allowed to come into contact with metals, with which it reacts, in most cases, to produce hydrogen which forms explosive mixtures with air. Also, the product shall not be allowed to come into contact with bases, alkalis, sulfites and any oxychlorine compounds.

¹⁾ United Nations Number.

²⁾ Regulations concerning International carriage of Dangerous goods by rail.

³⁾ European Agreement concerning the international carriage of Dangerous goods by Road.

⁴⁾ International Maritime transport of Dangerous Goods.

⁵⁾ International Air Transport Association.