



NSAI
Standards

Irish Standard
I.S. EN 12932:2015

Chemicals used for treatment of water
intended for human consumption -
Chemicals for emergency use - Sodium
dichloroisocyanurate, dihydrate

I.S. EN 12932:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 12932:2015

Published:

2015-03-25

This document was published under the authority of the NSAI and comes into effect on:

2015-04-11

ICS number:

71.100.80

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 12932

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2015

ICS 71.100.80

Supersedes EN 12932:2008

English Version

**Chemicals used for treatment of water intended for human
consumption - Chemicals for emergency use - Sodium
dichloroisocyanurate, dihydrate**

Produits chimiques utilisés pour le traitement de l'eau
destinée à la consommation humaine - Produits chimiques
utilisés en cas d'urgence - Dichloroisocyanurate de sodium
dihydraté

Produkte zur Aufbereitung von Wasser für den
menschlichen Gebrauch - Produkte für den Notfall -
Natriumdichlorisocyanurat-dihydrat

This European Standard was approved by CEN on 20 December 2014.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

	Page
Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Description	6
3.1 Identification.....	6
3.1.1 Chemical name.....	6
3.1.2 Synonym or common name.....	6
3.1.3 Relative molecular mass.....	6
3.1.4 Empirical formula.....	6
3.1.5 Chemical formula.....	7
3.1.6 CAS Registry Number	7
3.1.7 EINECS reference	7
3.2 Commercial form	7
3.3 Physical properties.....	7
3.3.1 Appearance and odour.....	7
3.3.2 Density	7
3.3.3 Solubility in water	7
3.3.4 Vapour pressure	7
3.3.5 Boiling point at 100 kPa	7
3.3.6 Melting point.....	7
3.3.7 Specific heat.....	7
3.3.8 Viscosity	8
3.3.9 Critical temperature	8
3.3.10 Critical pressure.....	8
3.3.11 Physical hardness	8
3.4 Chemical properties	8
4 Purity criteria.....	8
4.1 General.....	8
4.2 Composition of commercial product.....	8
4.3 Impurities and main by-products	8
4.4 Chemical parameters	8
5 Test methods.....	9
5.1 Sampling.....	9
5.2 Analysis	9
5.2.1 Determination of available chlorine (main product).....	9
5.2.2 Impurities	11
5.2.3 Chemical parameters	14
6 Labelling - Transportation - Storage.....	16
6.1 Means of delivery.....	16
6.2 Labelling according to the EU legislation	17
6.3 Transportation regulations and labelling	17
6.4 Marking	18
6.5 Storage.....	18
6.5.1 General.....	18
6.5.2 Long term stability.....	18
6.5.3 Storage incompatibilities	18

Annex A (informative) General information on sodium dichloroisocyanurate, dihydrate	19
A.1 Origin	19
A.1.1 Raw materials	19
A.1.2 Manufacturing process	19
A.2 Use	19
A.2.1 Function	19
A.2.2 Form in which it is used	19
A.2.3 Treatment dose	19
A.2.4 Mean of application	19
A.2.5 Secondary effects	20
A.2.6 Removal of excess product	20
Annex B (normative) General rules relating to safety	21
B.1 Rules for safe handling and use	21
B.2 Emergency procedures	21
B.2.1 First aid	21
B.2.2 Spillage	21
B.2.3 Fire	22
Annex C (normative) Determination of arsenic, antimony and selenium (atomic absorption spectrometry hydride technique)	23
C.1 General principle	23
C.2 Interferences	23
C.3 Reagents	23
C.4 Apparatus	25
C.5 Procedure	26
C.5.1 Preparation of the apparatus	26
C.5.2 Preparation of calibration solutions	27
C.5.3 Preparation of test solutions and standard solutions	27
C.5.4 Determination of arsenic with sodium borohydride	27
C.5.5 Determination of selenium with sodium borohydride	27
C.5.6 Determination of antimony with sodium borohydride	28
C.6 Calculation	28
Bibliography	29

EN 12932:2015 (E)

Foreword

This document (EN 12932:2015) 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 September 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

This document supersedes EN 12932:2008.

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.

Significant technical difference between this edition and EN 12932:2008 is as follows:

- a) deletion of reference to EU Directive 67/548/EEC of June 27, 1967 in order to take into account the latest Regulation in force (see [2]);
- b) 6.2 – updating of risk and safety labelling according to EU Regulation [2] and its latest Adaptations to Technical Progress).

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the 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.

EN 12932:2015 (E)

1 Scope

This European Standard is applicable to sodium dichloroisocyanurate dihydrate used for emergency treatment of water intended for human consumption. It describes the characteristics of sodium dichloroisocyanurate dihydrate and specifies the requirements and the corresponding test methods for sodium dichloroisocyanurate dihydrate. It gives information on its use in water treatment. It also determines the rules relating to safe handling and use of sodium dichloroisocyanurate dihydrate (see Annex B).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1233, *Water quality - Determination of chromium - Atomic absorption spectrometric methods*

EN ISO 12846, *Water quality - Determination of mercury - Method using atomic absorption spectrometry (AAS) with and without enrichment (ISO 12846)*

EN ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

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

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

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

ISO 8288:1986, *Water quality — Determination of cobalt, nickel, copper, zinc, cadmium and lead — Flame atomic absorption spectrometric methods*

3 Description

3.1 Identification

3.1.1 Chemical name

1-sodium, 3, 5-dichloro-1,3,5-triazine-2, 4, 6-trione dihydrate.

3.1.2 Synonym or common name

Sodium dichloroisocyanurate, dihydrate.

Troclosene sodium, dihydrate

3.1.3 Relative molecular mass

256,02

3.1.4 Empirical formula

$C_3N_3O_3Cl_2Na \cdot 2H_2O$

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-