

STN	Zariadenia na výrobu biocídov <i>in-situ</i> Aktívny chlór generovaný z chloridu sodného elektrolýzou	STN EN 17818 75 8711
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Devices for in-situ generation of biocides - Active chlorine generated from sodium chloride by electrolysis

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EUROPEAN STANDARD

EN 17818

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English Version

Devices for *in-situ* generation of biocides - Active chlorine generated from sodium chloride by electrolysis

Équipements pour le production *in situ* de biocides -
Chlore actif produit à partir de chlorure de sodium par
électrolyse

Anlagen zur *In-Situ*-Erzeugung von Bioziden - Aktives
Chlor hergestellt aus Natriumchlorid durch Elektrolyse

This European Standard was approved by CEN on 27 November 2023.

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.

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

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EN 17818:2023 (E)

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EN 17818:2023 (E)**European foreword**

This document (EN 17818:2023) 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of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

Devices according to this document may be used in different fields of application, e.g. drinking water, swimming pool water, wastewater, air treatment, surface disinfection, etc. Additional requirements to this document shall be observed, where appropriate for the specific application.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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

Introduction

In respect of potential adverse effects on human and animal health and the environment, 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) note 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.

EN 17818:2023 (E)

1 Scope

This document defines the minimum requirements for treatment systems, which generate the active substance - "Active chlorine" - from sodium chloride by electrolysis for on-site (*in situ*) operation.

The *in situ* generated active substance (IGAS), in this case active chlorine, may be put into a solution ("off-line") or directly generated in the pipes ("in-line").

This document specifies the device construction, and test methods for the equipment used for *in situ* generation of active chlorine. It specifies requirements for instructions for installation, operation, maintenance, safety and for documentation to be provided with the product.

The *in situ* generation of active substances and the placing of their precursors on the EU market are subject to the specifications of the Biocidal Products Regulation (EU) 528/2012 ["Biocidal products"]. Active substances, generated by devices, which are claiming compliance with this document, shall comply with the BPR for both the registered active chlorine, quality standards and the precursor in accordance with appropriate application and "Product Type" as listed in the BPR.

This standard does not identify applications for *in situ* devices for generation of active chlorine. The range of applications for *in situ* generation of chlorine is diverse. It is the responsibility of the economic operator/product supplier, claiming compliance with this standard, to identify the appropriate system type and operating conditions for the specific application and to:

- specify the quality of the biocide appropriate to the application. This may be defined in national or international standards;
- specify the appropriate product type and operating conditions (concentration, dosage rate and quality of the active chlorine);
- specify any other regulatory requirements relevant to the specific application;
- specify the appropriate precursor sodium chloride, for the application;
- and to label the product accordingly.

2 Normative references

The following documents are referenced in the text in such a way that some parts of these or their entire contents constitute requirements of this document. With dated references, only the referenced issue is applicable. With undated references, the last issue of the referenced document is applicable (including all changes).

EN 1717, *Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow*

EN IEC 60751, *Industrial platinum resistance thermometers and platinum temperature sensors (IEC 60751)*

EN ISO 7393-1, *Water quality — Determination of free chlorine and total chlorine — Part 1: Titrimetric method using N,N-diethyl-1,4-phenylenediamine (ISO 7393-1)*

EN ISO 7393-2, *Water quality — Determination of free chlorine and total chlorine — Part 2: Colorimetric method using N,N-dialkyl-1,4-phenylenediamine, for routine control purposes (ISO 7393-2)*

EN ISO 10304-1, *Water quality — Determination of dissolved anions by liquid chromatography of ions — Part 1: Determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulfate (ISO 10304-1)*

EN ISO 10304-4, *Water quality — Determination of dissolved anions by liquid chromatography of ions — Part 4: Determination of chlorate, chloride and chlorite in water with low contamination (ISO 10304-4)*

EN ISO 15061, *Water quality — Determination of dissolved bromate — Method by liquid chromatography of ions (ISO 15061)*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

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