BS EN 1405:2023

BSI Standards Publication

# Chemicals used for treatment of water intended for human consumption — Sodium alginate

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# National foreword

This British Standard is the UK implementation of EN 1405:2023. It supersedes BS EN 1405:2009, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CII/59, Chemicals and filtering media for water treatment.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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EUROPÄISCHE NORM

# EN 1405

October 2023

ICS 71.100.80

Supersedes EN 1405:2009

English Version

# Chemicals used for treatment of water intended for human consumption - Sodium alginate

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

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Natrium-Alginat

This European Standard was approved by CEN on 14 August 2023.

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## European foreword

This document (EN 1405:2023) 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of an identical text or by endorsement, at the latest by April 2024, and conflicting national standards shall be withdrawn at the latest by April 2024.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.

This document supersedes EN 1405:2009.

In comparison with the previous edition EN 1405:2009, the following technical modifications have been made:

a) updating in line with current legislation;

b) modification of 8.3 on transportation regulations and labelling, adding the sentence “The user shall be aware of the incompatibilities between transported products.”;

c) modification of 8.4 on marking. The requirements of marking are also applied to the accompanying documents.

Annex A is informative and gives information on origin, use and handling of sodium alginate.

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.



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# Introduction

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this document:

1) 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;

2) 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 document 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 document is subject to regulation or control by national authorities.

**WARNING — The use of this document may involve hazardous substances, materials, operations and equipment. This document does not purport to address all the safety aspects associated with its use. It is the responsibility of the user of this document to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.**



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# 1 Scope

This document is applicable to sodium alginate used for treatment of water intended for human consumption. It describes the characteristics of sodium alginate and specifies the requirements and the corresponding test methods for sodium alginate. It gives information on their use in water treatment.

# 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 ISO 3696:1995, *Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)*

ISO 3165:1976, *Sampling of chemical products for industrial use — Safety in sampling*

ISO 6206:1979, *Chemical products for industrial use — Sampling — Vocabulary*

ISO 8213:1986, *Chemical products for industrial use — Sampling techniques — Solid chemical products in the form of particles varying from powders to coarse lumps*

# 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

# 4 Description

## 4.1 Identification

### 4.1.1 Chemical name(s)

Sodium alginate.

NOTE Linear glycuronoglycan consisting mainly of (1-4) linked β-D-mannuronic acid units and (1-4) linked α-L-guluronic acid units in pyranose ring form.

### 4.1.2 Synonym(s) or common name(s)

Algin.

### 4.1.3 Relative molecular mass

Typically in the range of 10 000 to 250 000 Daltons.

### 4.1.4 Empirical formulae

— $-(C_6O_6H_7Na)_n-$

where

$n$ is variable depending on the product.



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