

Chemicals used for treatment of water intended for human consumption - Aluminium-based coagulants - Analytical methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 71.100.80

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EUROPEAN STANDARD

EN 1302

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 1302:1999

English Version

Chemicals used for treatment of water intended for human consumption - Aluminium-based coagulants - Analytical methods

Produits chimiques utilisés pour le traitement de l'eau destinée à la consommation humaine - Coagulants à base d'aluminium - Méthodes d'analyse

Produkte zur Aufbereitung von Wasser für den menschlichen Gebrauch - Flockungsmittel auf Aluminiumbasis - Analytische Methoden

This European Standard was approved by CEN on 2 September 2024.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents	Page
European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Methods of analysis	5
5 Sampling	8
5.1 General.....	8
5.2 Solids	8
5.3 Solutions.....	8
5.3.1 Sampling from drums and bottles	8
5.3.2 Sampling from tanks and tankers.....	8
6 Expression of results	9
6.1 Aluminium content.....	9
6.2 Iron.....	9
6.3 Sodium, calcium, chloride, sulfate and silicate	9
6.4 Free acid.....	9
6.5 Basicity	9
6.6 Insoluble matters.....	9
6.7 Chemical parameters.....	9
6.8 Repeatability	9
Annex A (normative) Analysis of aluminium content	10
Annex B (normative) Analysis of chemical parameters	16
Annex C (informative) Analyses of chemical parameters – alternative methods	36

European foreword

This document (EN 1302:2024) 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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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 1302:1999.

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

- Replacement of the withdrawn aluminium product standards EN 881 and EN 883 by EN 17034.
- Replacement of the withdrawn mercury analysing standard ISO 5666-1:1983 by ISO 12846:2012.
- Removal of the withdrawn standard ISO 6382:1981. As there was no replacement, the analysing method for silicate content based on this standard was removed. To analyse silicon this standard applies ICP-OES as given in Annex B.
- Removal of routine methods used to determinate arsenic. Method: Silver diethyldithiocarbamate spectrophotometric method based on standard ISO 6595:1982 as this standard has been withdrawn without replacement. This standard applies ICP-OES as given in Annex B.
- Removal of routine methods used to determinate iron. Method: 1,10-Phenanthroline spectrophotometric method based on standard ISO 6685:1982 as this standard has been withdrawn without replacement. This standard applies ICP-OES as given in Annex B.
- Removal of a method for determination of iron (total and Fe²⁺) (volumetric method) as the method uses potassium dichromate and there are other options for iron determination. This standard applies ICP-OES as given in Annex B.
- Update of the clause titles to correspond the CEN Standard form.
- Update of Table 1 and 2 to correspond the analytical methods available in the standard.

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.

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1 Scope

This document is applicable to aluminium-based coagulants used for treatment of water intended for human consumption. It specifies analytical methods to be used for products described in EN 878, EN 882, EN 885, EN 886, EN 887, EN 935 and EN 17034.

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 878, *Chemicals used for treatment of water intended for human consumption — Aluminium sulfate*

EN 882, *Chemicals used for treatment of water intended for human consumption — Sodium aluminate*

EN 885, *Chemicals used for treatment of water intended for human consumption — Polyaluminium chloride hydroxide silicate*

EN 886, *Chemicals used for treatment of water intended for human consumption — Polyaluminium hydroxide silicate sulfate*

EN 887, *Chemicals used for treatment of water intended for human consumption — Aluminium iron (III) sulfate*

EN 935, *Chemicals used for treatment of water intended for human consumption — Aluminium iron(III) chloride (monomeric) and aluminium iron(III) chloride hydroxide (monomeric)*

EN 17034, *Chemicals used for treatment of water intended for human consumption — Aluminium chloride anhydrous, aluminium chloride basic, dialuminium chloride pentahydroxide and aluminium chloride hydroxide sulfate*

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 5725-2, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

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

ISO 6227:1982, *Chemical products for industrial use — General method for determination of chloride ions — Potentiometric method*

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