ICS 13.060.50 SLOVENSKÁ TECHNICKÁ NORMA December 2024

STN	**Kvalita vody** **Stanovenie vybraných parametrov diskrétnymi analytickými systémami** **Časť 1: Amónne ióny, dusičnany, dusitany, chloridy, ortofosforečnany, sírany a kremičitany s fotometrickou detekciou (ISO 15923-1: 2013)**	**STN** **EN ISO 15923-1** 75 7428

Water quality - Determination of selected parameters by discrete analysis systems - Part 1: Ammonium, nitrate, nitrite, chloride, orthophosphate, sulfate and silicate with photometric detection (ISO 15923-1:2013)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/24

Obsahuje: EN ISO 15923-1:2024, ISO 15923-1:2013

139354

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 15923-1

August 2024

ICS 13.060.50

English Version

Water quality - Determination of selected parameters by discrete analysis systems - Part 1: Ammonium, nitrate, nitrite, chloride, orthophosphate, sulfate and silicate with photometric detection (ISO 15923-1:2013)

Qualité de l'eau - Détermination de paramètres sélectionnés par des systèmes d'analyse discrète - Partie 1: Ammonium, nitrate, nitrite, chlorure, orthophosphate, sulfate et silicate par détection photométrique (ISO 15923-1:2013)

Wasserbeschaffenheit - Bestimmung von ausgewählten Parametern mittels Einzelanalysensystemen - Teil1: Ammonium, Nitrat, Nitrit, Chlorid, Orthophosphat, Sulfat und Silikat durch photometrische Detektion (ISO 15923-1:2013)

This European Standard was approved by CEN on 5 August 2024.

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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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 15923-1:2024 E

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European foreword

The text of ISO 15923-1:2013 has been prepared by Technical Committee ISO/TC 147 "Water quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15923-1:2024 by Technical Committee CEN/TC 230 “Water analysis” the secretariat of which is held by DIN.

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 February 2025, and conflicting national standards shall be withdrawn at the latest by February 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.

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Endorsement notice

The text of ISO 15923-1:2013 has been approved by CEN as EN ISO 15923-1:2024 without any modification.

INTERNATIONAL STANDARD

ISO 15923-1

First edition
2013-12-15

Water quality — Determination of selected parameters by discrete analysis systems —

Part 1: Ammonium, nitrate, nitrite, chloride, orthophosphate, sulfate and silicate with photometric detection

Qualité de l'eau — Détermination de paramètres sélectionnés par des systèmes d'analyse discrète —

Partie 1: Ammonium, nitrate, nitrite, chlorure, orthophosphate, sulfate et silicate par détection photométrique

Reference number
ISO 15923-1:2013(E)

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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The committee responsible for this document is ISO/TC 147, *Water quality*, Subcommittee SC 2, *Physical, chemical and biochemical methods*.

ISO 15923 consists of the following parts, under the general title *Water quality — Determination of selected parameters by discrete analysis systems*:

— *Part 1: Ammonium, nitrate, nitrite, chloride, orthophosphate, sulfate and silicate with photometric detection*

Introduction

Many photometric determinations can be automated with a discrete analysis system. With one single apparatus, a large number of different parameters can be determined, and the parameters to be determined can be specified for each sample. Working with small volumes requires less sample material and reagent.

Samples that fall beyond the normal measuring range can either be automatically diluted or measured again with a different measuring range.

This part of ISO 15923 specifies methods for the automatic determination of ammonium, nitrate, nitrite, chloride, orthophosphate, and silicate with photometric detection and a turbidimetric determination of sulfate using a discrete analysis system. The field of application is water (ground, potable, surface, waste, eluates, and boiler water).

INTERNATIONAL STANDARD ISO 15923-1:2013(E)

Water quality — Determination of selected parameters by discrete analysis systems —

Part 1:
Ammonium, nitrate, nitrite, chloride, orthophosphate, sulfate and silicate with photometric detection

WARNING — Persons using this part of ISO 15923 should be familiar with normal laboratory practice. This part of ISO 15923 does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

IMPORTANT — It is absolutely essential that tests conducted in accordance with this part of ISO 15923 be carried out by suitably qualified staff.

1 Scope

This part of ISO 15923 specifies methods for the automatic performance of spectrophotometric and turbidimetric analyses with a discrete analysis system for determining ammonium, nitrate, nitrite, chloride, orthophosphate, sulfate, and silicate. The field of application is ground, potable, surface, waste, eluates, and boiler water.

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.

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

ISO 5667-3, *Water quality — Sampling — Part 3: Preservation and handling of water samples*

ISO 8466-1, *Water quality — Calibration and evaluation of analytical methods and estimation of performance characteristics — Part 1: Statistical evaluation of the linear calibration function*

ISO 8466-2, *Water quality — Calibration and evaluation of analytical methods and estimation of performance characteristics — Part 2: Calibration strategy for non-linear second-order calibration functions*