

SLOVENSKI STANDARD SIST EN ISO 11732:2005

01-julij-2005

BUXca Yý U. SIST EN ISO 11732:1999

?U_cj cghij cXY'!'8 c`c Yj Ub^Y'Ua cb]^Yj Y[UXi ý]_U'Ë'A YhcXU'g'dfYhc bc'UbU']nc ff : 5 ']b': =5 Ł']b'gdY_lfca Ylf]^g_c'XYhY_W]^c'flGC'%+' & &\$\$) Ł

Water quality - Determination of ammonium nitrogen - Method by flow analysis (CFA and FIA) and spectrometric detection (ISO 11732:2005)

Wasserbeschaffenheit - Bestimmung von Ammoniumstickstoff - Verfahren mittels Fließanalytik (CFA und FIA) und spektrometrischer Detektion (ISO 11732:2005)

Qualité de l'eau - Dosage de l'azote ammoniacal - Méthode par analyse en flux (CFA et FIA) et détection spectrométrique (ISO 11732:2005)

Ta slovenski standard je istoveten z: EN ISO 11732:2005

ICS:

13.060.50 Ú¦^ã\æçækç[å^Á;æÁ^{ ã}^ Examination of water for

•} [çã chemical substances

SIST EN ISO 11732:2005 en,fr,de

SIST EN ISO 11732:2005

ITON STANDARD PREWIEND AND A LANDS OF THE WAS A STANDARD OF THE PROPERTY OF TH

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN ISO 11732**

February 2005

ICS 13.060.50

Supersedes EN ISO 11732:1997

English version

Water quality - Determination of ammonium nitrogen - Method by flow analysis (CFA and FIA) and spectrometric detection (ISO 11732:2005)

Qualité de l'eau - Dosage de l'azote ammoniacal - Méthode par analyse en flux (CFA et FIA) et détection spectrométrique (ISO 11732:2005) Wasserbeschaffenheit - Bestimmung von Ammoniumstickstoff - Verfahren mittels Fließanalytik (CFA und FIA) und spektrometrischer Detektion (ISO 11732:2005)

This European Standard was approved by CEN on 3 January 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 11732:2005 (E)

Foreword

This document (EN ISO 11732:2005) has been prepared by Technical Committee ISO/TC 147 "Water quality" in collaboration with 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 August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

This document supersedes EN ISO 11732:1997.

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

Endorsement notice

The text of ISO 11732:2005 has been approved by CEN as EN ISO 11732:2005 without any modifications.

INTERNATIONAL STANDARD

ISO 11732

Second edition 2005-02-01

Water quality — Determination of ammonium nitrogen — Method by flow analysis (CFA and FIA) and spectrometric detection

Qualité de l'eau — Dosage de l'azote ammoniacal — Méthode par analyse en flux (CFA et FIA) et détection spectrométrique

et ST A Standik full sent



ISO 11732:2005(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

INTERIOR AND AREA STREET, AND AREA OF THE STREET, AND

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

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

Co	ntents	Page
Fore	eword	iv
Intro	oduction	v
1	Scope	1
2	Normative references	1
3	Determination of ammonium nitrogen by flow injection analysis (FIA) and spectrometric detection	1
4	Determination of ammonium nitrogen by continuous flow analysis (CFA) and spectrometric detection	7
5	Calculation	10
6	Precision	
7	Test report	
Ann	ex A (informative) Examples of flow analysis systems	12
Annex B (informative) Precision data		16
Bibli	ex A (informative) Examples of flow analysis systems ex B (informative) Precision data iography iography	18

iii

ISO 11732:2005(E)

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 11732 was prepared by Technical Committee ISO/TC 147, Water quality, Subcommittee SC 2, Physical, chemical and biochemical methods.

This second edition cancels and replaces the first edition (ISO 11732:1997), which has been technically revised.

ISO 11732:2005(E)

Introduction

Methods using flow analysis are automating wet chemical procedures and are therefore particularly suitable for the processing of large sample series at a high analysis frequency (up to 100 samples per hour).

It is differentiated between flow injection analysis (FIA)^{[1],[2]} and continuous flow analysis (CFA)^[3]. Both methods consist of the automatic dosage of the sample introduced into a flow system (manifold) in which the sample analytes react with the reagent solutions on their way through the manifold. The sample preparation may be integrated into the manifold. The reaction product is measured in a flow detector.

The user should be aware that particular problems could require the specification of additional marginal conditions.

IT of SI AND ARD PREVIEW IN WASHING COLLEGE TO BE STORED TO BE STORED

SIST EN ISO 11732:2005

Tell SI AND ARD PREINING SINGLES INTO SANDE IN THE STANDARD OF STANDARD SECTION OF STA