

Water quality — Determination of mercury — Method using a combined preservation and digestion step followed by atomic fluorescence spectrometry

ICS 13.060.50

National foreword

This British Standard is the UK implementation of EN ISO 17852:2008. It is identical with ISO 17852:2006. It supersedes BS EN 13506:2002 and BS ISO 17852:2006, which are withdrawn.

The title of this British Standard has been extended from the reference document to reflect the applicability of this method.

The UK participation in its preparation was entrusted by Technical Committee EH/3, Water quality, to Subcommittee EH/3/2, Physical, chemical and biochemical methods.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 June 2006

© BSI 2008

ISBN 978 0 580 59128 0

Amendments/corrigenda issued since publication

Date	Comments
30 June 2008	This corrigendum renumbers BS ISO 17852:2006 as BS EN ISO 17852:2008

English Version

Water quality - Determination of mercury - Method using atomic fluorescence spectrometry (ISO 17852:2006)

Qualité de l'eau - Dosage du mercure - Méthode par spectrométrie de fluorescence atomique (ISO 17852:2006)

Wasserbeschaffenheit - Bestimmung von Quecksilber - Verfahren mittels Atomfluoreszenzspektrometrie (ISO 17852:2006)

This European Standard was approved by CEN on 8 December 2007.

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 Management Centre 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, 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

Foreword

The text of ISO 17852:2006 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 17852:2008 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 July 2008, and conflicting national standards shall be withdrawn at the latest by July 2008.

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

This document supersedes EN 13506:2001.

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

Endorsement notice

The text of ISO 17852:2006 has been approved by CEN as EN ISO 17852:2008 without any modifications.

Contents

Page

1	Scope	1
2	Normative references	1
3	Principle	2
4	Interferences	2
5	Reagents and standards	2
6	Apparatus and instrumentation	5
7	Sample collection and pre-treatment	6
8	Instrumental set up	6
9	Procedure	7
10	Test report	8
11	Precision	8
	Annex A (informative) Additional information	9
	Annex B (informative) Schematic block diagram	10
	Annex C (informative) Availability of reagents	11
	Annex D (informative) Precision data	12
	Bibliography	13

blank

Introduction

In natural water sources, mercury compounds generally occur in very small concentrations of less than 0,1 µg/l. Higher concentrations may be found, for example, in industrial waste water.

Both inorganic and organic compounds of mercury may be present. Mercury can also accumulate in sediment and sludge.

In order to fully decompose all of the mercury compounds, a digestion procedure is necessary. Digestion can be omitted only if it is certain that the mercury concentration can be measured without this pre-treatment.

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