

This is a preview of "ISO 8518:2001". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2001-12-15

Workplace air — Determination of particulate lead and lead compounds — Flame or electrothermal atomic absorption spectrometric method

*Air des lieux de travail — Dosage du plomb particulaire et des composés
particulaires du plomb — Méthode par spectrométrie d'absorption atomique
dans la flamme ou méthode par spectrométrie d'absorption avec
atomisation électrothermique*



Reference number
ISO 8518:2001(E)

© ISO 2001

This is a preview of "ISO 8518:2001". [Click here to purchase the full version from the ANSI store.](#)

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.

© ISO 2001

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.ch
Web www.iso.ch

Printed in Switzerland

This is a preview of "ISO 8518:2001". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Principle	5
5 Reactions	6
6 Requirement	6
7 Reagents	6
8 Apparatus	7
9 Occupational exposure assessment	11
9.1 Assessment strategy	11
9.2 Measurement strategy	11
9.3 Selection of measurement conditions and measurement pattern	11
10 Sampling	12
10.1 Preliminary considerations	12
10.2 Preparation of sampling equipment	13
10.3 Sampling position	14
10.4 Collection of samples	14
10.5 Transportation	14
11 Analysis	15
11.1 Cleaning of glassware and plasticware	15
11.2 Preparation of sample and blank solutions	15
11.3 Instrumental analysis	17
11.4 Estimation of the instrumental detection limit	20
11.5 Estimation of the method detection limit	20
11.6 Quality control	20
12 Expression of results	21
12.1 Calculation	21
12.2 Method performance	22
13 Special cases	23
14 Test report	23
Annexes	
A Guidance on filter selection.....	25
B Temperature and pressure correction	27
Bibliography.....	29

This is a preview of "ISO 8518:2001". [Click here to purchase the full version from the ANSI store.](#)

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 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 8518 was prepared by Technical Committee ISO/TC 146, *Air quality*, Subcommittee SC 2, *Workplace atmospheres*.

This second edition cancels and replaces the first edition (ISO 8518:1990), which has been technically revised.

Annexes A and B of this International Standard are for information only.

This is a preview of "ISO 8518:2001". [Click here to purchase the full version from the ANSI store.](#)

Introduction

The health of workers in many industries, e.g. mining, metal refining, battery manufacture, construction, etc., is at risk through exposure by inhalation of particulate lead and lead compounds. Industrial hygienists and other public health professionals need to determine the effectiveness of measures taken to control workers' exposure, and this is generally achieved by making workplace air measurements. This International Standard provides a method for making valid exposure measurements for lead. It will be of benefit to: agencies concerned with health and safety at work; industrial hygienists and other public health professionals; analytical laboratories; industrial users and workers of metals and metalloids, etc.

It has been assumed in the drafting of this International Standard that the execution of its provisions, and the interpretation of the results obtained, is entrusted to appropriately qualified and experienced people.