

Methods for chemical analysis of tobacco and tobacco products —

Part 10: Determination of organochlorine pesticide residues (gas chromatographic method)

ICS 65.160; 71.040.40

National foreword

This British Standard reproduces verbatim ISO 4389:2000 and implements it as the UK national standard. It supersedes BS 5202-10:1998 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee AW/40, Tobacco and tobacco products, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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This British Standard, having been prepared under the direction of the Consumer Products and Services Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 May 2001

Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii and iii, pages 1 to 15 and a back cover.

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INTERNATIONAL STANDARD

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Tobacco and tobacco products — Determination of organochlorine pesticide residues — Gas chromatographic method

*Tabac et produits du tabac — Dosage des résidus de pesticides
organochlorés — Méthode par chromatographie en phase gazeuse*



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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.

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 4389 was prepared by Technical Committee ISO/TC 126, *Tobacco and tobacco products*.

This third edition cancels and replaces the second edition (ISO 4389:1997). As a result of extensive examination, the scope of this edition has been extended to tobacco products. Technical Corrigendum 1:1998 has been included.

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

Tobacco and tobacco products — Determination of organochlorine pesticide residues — Gas chromatographic method

1 Scope

This International Standard specifies a method for the gas chromatographic determination of pesticide residues in leaf tobacco, manufactured tobacco and tobacco products.

The method is applicable to the determination of the organochlorine pesticides listed in Table 1. The method is particularly recommended for determination of the substances within the detection limits listed in Table 1.

NOTE 1 The method has been demonstrated to be free from errors that may arise from interfering peaks on the chromatogram that originate from non-organochlorine pesticide substances, when applied to various styles of leaf tobacco. However, the preceding statement cannot be assumed to apply to all forms and variants of tobacco and tobacco products and care should be taken in the interpretation of any unexpected, apparently positive results. Some analysts advocate the use of mass spectrometric confirmation of the chemical structure of compounds detected by chromatography in such circumstances.

NOTE 2 ISO 1750 contains the systematic chemical names and structures corresponding to the common names given in Table 1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 648, *Laboratory glassware — One-mark pipettes*.

ISO 1042, *Laboratory glassware — One-mark volumetric flasks*.

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

ISO 4874, *Tobacco — Sampling of batches of raw material — General principles*.

ISO 8243, *Cigarettes — Sampling*.