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BSI Standards Publication

Paints and varnishes — Determination of solvents in coating materials containing organic solvents only — Gas-chromatographic method

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National foreword

This British Standard is the UK implementation of EN ISO 23322:2021. It is identical to ISO 23322:2021. It supersedes BS ISO 23322:2021, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee STI/10, Test methods for paints.

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

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Published by BSI Standards Limited 2022

ISBN 978 0 539 18213 2

ICS 87.040

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2021.

Amendments/corrigenda issued since publication

Date	Text affected
31 January 2022	This corrigendum renumbers BS ISO 23322:2021 as BS EN ISO 23322:2021

EUROPÄISCHE NORM

December 2021

ICS 87.040

English Version

Paints and varnishes - Determination of solvents in coating materials containing organic solvents only - Gas-chromatographic method (ISO 23322:2021)

Peintures et vernis - Détermination des solvants dans les produits de peinture contenant uniquement des solvants organiques - Méthode par chromatographie en phase gazeuse (ISO 23322:2021)

Lösemittel für Beschichtungsstoffe - Bestimmung der Lösemittel in ausschließlich organische Lösemittel enthaltenden Beschichtungsstoffen - Gaschromatographisches Verfahren (ISO 23322:2021)

This European Standard was approved by CEN on 5 December 2021.

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

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European foreword

The text of ISO 23322:2021 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 23322:2021 by Technical Committee CEN/TC 139 "Paints and varnishes" 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of an identical text or by endorsement, at the latest by June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

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 23322:2021 has been approved by CEN as EN ISO 23322:2021 without any modification.

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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 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 16, *Chemical analysis*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Paints and varnishes — Determination of solvents in coating materials containing organic solvents only — Gas-chromatographic method

1 Scope

This document specifies a method for the gas-chromatographic determination of the qualitative and quantitative composition of solvents contained in a product. The method is applicable to coating materials containing solely organic solvents (generally called conventional coating materials) and binder solutions and non-aqueous dispersions containing solely organic solvents.

The method defined in this document is not applicable for determination of volatile organic compounds (VOC) and semi-volatile organic compounds (SVOC) content.

NOTE For determination of VOC and SVOC, see ISO 11890-2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4618, *Paints and varnishes — Terms and definitions*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Units

The analytical results are expressed as a mass fraction.

5 Principle

The volatile fraction of the sample of product under test is separated by gas chromatography. Either a hot sample injection system, a cold sample injection system or a headspace injection system can be used, depending on the product type. After the components have been identified, they are quantified from the peak areas using the internal standard method.