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

*Peintures et vernis — Détermination des solvants dans les produits de
peinture contenant uniquement des solvants organiques — 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.

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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.

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.