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**Paints and varnishes - Determination of solvents in water-thinnable coating materials - Gas-chromatographic method (ISO 22518:2019)**

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## Paints and varnishes - Determination of solvents in water-thinnable coating materials - Gas-chromatographic method (ISO 22518:2019)

Peintures et vernis - Détermination des solvants dans des peintures diluable à l'eau - Méthode par chromatographie en phase gazeuse (ISO 22518:2019)

Beschichtungsstoffe - Bestimmung von Lösemitteln in wasserverdünnbaren Beschichtungsstoffen - Gaschromatographisches Verfahren (ISO 22518:2019)

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EN ISO 22518:2020 (E)

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## European foreword

The text of ISO 22518:2019 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 22518:2020 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of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.

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The text of ISO 22518:2019 has been approved by CEN as EN ISO 22518:2020 without any modification.

# INTERNATIONAL STANDARD

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## **Paints and varnishes — Determination of solvents in water- thinnable coating materials — Gas- chromatographic method**

*Peintures et vernis — Détermination des solvants dans des peintures diluable à l'eau — Méthode par chromatographie en phase gazeuse*



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**ISO 22518:2019(E)****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](http://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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

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](http://www.iso.org/members.html).

# Paints and varnishes — Determination of solvents in water-thinnable coating materials — Gas-chromatographic method

## 1 Scope

This document specifies a method for the gas-chromatographic determination of the solvents in water-thinnable paints and varnishes, binder solutions, emulsions and dispersions.

With the precision stated in [Clause 13](#), single components above 0,02 % (mass fraction) can be determined quantitatively.

The method defined in this document is not applicable for the determination of Volatile Organic Compounds (VOC) and Semi-Volatile Organic Compounds (SVOC) content.

NOTE For the determination of VOC and SVOC, see ISO 11890-2<sup>[2]</sup>.

## 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 percentage mass fraction.

## 5 Principle

After sample preparation, the components contained in the sample under test are separated by gas chromatography. Either a hot or a cold sample 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.