
**Volatile organic liquids —
Determination of boiling range of
organic solvents used as raw materials**

*Liquides organiques volatils — Détermination de l'intervalle
de distillation des solvants organiques utilisés comme matières
premières*



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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 document 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*.

This second edition results from the reinstatement of ISO 4626:1980, which was withdrawn in 2017.

The main changes are as follows:

- the normative references have been updated.

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.

Volatile organic liquids — Determination of boiling range of organic solvents used as raw materials

1 Scope

This document specifies a method for determining the boiling range of liquids that boil between 30 °C and 300 °C at normal pressure, and that are chemically stable and do not corrode the apparatus during the distillation.

The method is applicable to organic liquids such as hydrocarbons, esters, alcohols, ketones, ethers and similar products.

NOTE 1 The method differs from that described in ISO 918 with respect to the volume of the distillation flask, the type of cooler and the distillation receiver.

NOTE 2 The method differs from that specified in ISO 3405 with respect to the volume of the distillation flask and the diameter of the hole in the flask support.

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 3165, *Sampling of chemical products for industrial use — Safety in sampling*

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

initial boiling point

temperature noted (corrected if required) at the moment when the first drop of condensate falls from the tip of the condenser during a distillation carried out under standardized conditions

3.2

dry point

temperature noted (corrected if required) at the moment of vaporization of the last drop of liquid at the bottom of the flask during a distillation carried out under standardized conditions, disregarding any liquid on the side of the flask and on the thermometer

3.3

boiling range

temperature interval between the *initial boiling point* (3.1) and the *dry point* (3.2)