

INTERNATIONAL STANDARD

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Essential oils — Determination of optical rotation

Huiles essentielles — Détermination du pouvoir rotatoire



Foreword

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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.

International Standard ISO 592 was prepared by Technical Committee ISO/TC 54, *Essential oils*.

This second edition cancels and replaces the first edition (ISO 592:1981), which has been technically revised.

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Essential oils — Determination of optical rotation

1 Scope

This International Standard specifies a method for determining the optical rotation of essential oils.

When dealing with solid oils, partially solid oils, oils that are highly viscous at room temperature, or highly coloured oils, this determination is carried out on a solution of the oil.

2 Normative reference

The following normative document contains 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 edition of the normative document 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 356, *Essential oils — Preparation of test samples*.

3 Terms and definitions

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

3.1

optical rotation of an essential oil, α_D^t

angle, expressed in milliradians and/or degrees of angle, described by the polarization plane of a luminous radiation whose wavelength is $589,3 \text{ nm} \pm 0,3 \text{ nm}$, corresponding to the D lines of sodium, when such light travels through a thickness of 100 mm of essential oil under given conditions of temperature

NOTE When the determination is carried out on different thickness, the value of α_D^t should be computed by reference to a thickness of 100 mm. Also measurements according to the Faraday magneto-optical principle are possible. The thickness of the sample is approximately 10 mm in that case.