

INTERNATIONAL  
STANDARD

ISO  
9844

First edition  
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**Oil of bitter orange (*Citrus aurantium* Linnaeus  
ssp. *aurantium*)**

*Huile essentielle d'orange amère (Citrus aurantium Linnaeus ssp.  
aurantium)*



Reference number  
ISO 9844:1991(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.

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 9844 was prepared by Technical Committee ISO/TC 54, *Essential oils*.

Annex A of this International Standard is for information only.

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## Oil of bitter orange (*Citrus aurantium* Linnaeus ssp. *aurantium*)

### 1 Scope

This International Standard specifies certain characteristics of oil of bitter orange (*Citrus aurantium* Linnaeus ssp. *aurantium*), with a view to facilitating the assessment of its quality.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/R 210:1961, *Essential oils — Packing.*

ISO/R 211:1961, *Essential oils — Labelling and marking containers.*

ISO 212:1973, *Essential oils — Sampling.*

ISO 279:1981, *Essential oils — Determination of relative density at 20 °C (Reference method).*

ISO 280:1976, *Essential oils — Determination of refractive index.*

ISO 592:1981, *Essential oils — Determination of optical rotation.*

ISO 875:1981, *Essential oils — Evaluation of miscibility in ethanol.*

ISO 1279:1984, *Essential oils — Determination of carbonyl value — Hydroxylammonium chloride method.*

ISO 4715:1978, *Essential oils — Quantitative evaluation of residue on evaporation.*

### 3 Definition

For the purposes of this International Standard, the following definition applies.

**3.1 oil of bitter orange<sup>1)</sup>:** The oil extracted, without heating, by mechanical treatment from the fresh pericarp of the fruit of *Citrus aurantium* Linnaeus ssp. *aurantium* of the rutaceae family.

### 4 Requirements

#### 4.1 Appearance

Clear liquid.

#### 4.2 Colour

Pale yellow to yellow-brown.

#### 4.3 Odour

Characteristic of fresh pericarp.

#### 4.4 Relative density at 20/20 °C

Minimum: 0,848 0

Maximum: 0,860 0

#### 4.5 Refractive index at 20 °C

Minimum: 1,472 0

Maximum: 1,476 0

1) Also called "bigarade orange"