

INTERNATIONAL STANDARD

ISO
3526

Second edition
1991-12-15

Oil of sage (*Salvia lavandulifolia*)

Huile essentielle de sauge (Salvia lavandulifolia)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 3526:1991

<https://standards.iteh.ai/catalog/standards/sist/5b2d2b1a-1114-4faa-bd3a-f37b876deb4d/iso-3526-1991>



Reference number
ISO 3526:1991(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 3526 was prepared by Technical Committee ISO/TC 54, *Essential oils*.

This second edition cancels and replaces the first edition (ISO 3526:1976), of which it constitutes a technical revision.

Annex A of this International Standard is for information only.

Oil of sage (*Salvia lavandulifolia*)

1 Scope

This International Standard specifies certain characteristics of oil of sage (*Salvia lavandulifolia*), 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 709:1980, *Essential oils — Determination of ester value*.

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

ISO 1242:1973, *Essential oils — Determination of the acid value*.

3 Definition

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

3.1 oil of sage: The oil obtained by steam distillation of the leaves and stems of *Salvia lavandulifolia*, growing wild or cultivated in Spain or in any part of the world.

4 Requirements

4.1 Appearance

Clear, mobile liquid.

4.2 Colour

Light yellow.

4.3 Odour

Characteristic, camphoraceous.

4.4 Relative density at 20/20 °C

Minimum: 0,907

Maximum: 0,930

4.5 Refractive index at 20 °C

Minimum: 1,465 0

Maximum: 1,472 0

4.6 Optical rotation at 20 °C

Between - 12° and + 17°

4.7 Miscibility in 80 % (V/V) ethanol at 20 °C

1 volume of the oil shall not require more than 2 volumes of 80 % (V/V) ethanol at 20 °C to give a clear solution.

4.8 Acid value

Maximum: 2,0

4.9 Ester value

Minimum: 15

Maximum: 55

4.10 Typical chromatogram

Evaluate the quantities of the following characteristic constituents of the essential oil on the chromatographic profile obtained. The proportion of these constituents, calculated in relation to the sum of all peak areas and assuming identical response factors, shall be as follows:

	Minimum (%)	Maximum (%)
α -Pinene	4	11
Sabinene	0,1	3
Limonene	2	5
1,8-Cineole	11	25
Thujene ($\alpha + \beta$)	Lower than 0,5 (normally there is none)	
Camphor	11	36
Linalool	0,5	9
Linalyl acetate	Lower than 5 %	
1-Terpinen-4-ol	Lower than 2 %	
Borneol	1	8

4.11 Flash point

49 °C (for information only)

5 Sampling

See ISO 212.

Minimum volume of test sample: 25 ml

NOTE 1 This volume is sufficient to carry out all the tests specified in this International Standard at least once.

6 Methods of test

6.1 Relative density at 20/20 °C

See ISO 279.

6.2 Refractive index at 20 °C

See ISO 280.

6.3 Optical rotation at 20 °C

See ISO 592.

6.4 Miscibility in 80 % (V/V) ethanol at 20 °C

See ISO 875.

6.5 Acid value

See ISO 1242.

6.6 Ester value

See ISO 709.

6.7 Establishment of a typical chromatogram

See annex A, for information only.

6.8 Flash point

Guidance on methods for the determination of flash point will be given in a future Technical Report.

7 Packaging, labelling and marking

See ISO/R 210 and ISO/R 211.

Annex A
(informative)

Typical chromatogram

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 3526:1991

<https://standards.iteh.ai/catalog/standards/sist/5b2d2b1a-1114-4faa-bd3a-f37b876deb4d/iso-3526-1991>

Constituents	
1	α -Thujene
2	α -Pinene
3	Camphene
4	Sabinene
5	Limonene
6	1,8-Cineole
7	Terpinolene
8	Camphor
9	Linalool
10	1-Terpinen-4-ol
11	α -Terpineol
12	Borneol
13	<i>ar</i> -Curcumene

Sample: oil of sage

Column: glass capillary, length 70 m, internal diameter 0,2 mm

Stationary phase: polyethylene glycol 20 000

Split ratio: 1/100

Oven temperature:

- initial temperature: 70 °C for 15 min
- programme of temperature rise: 2 °C/min
- final temperature: 180 °C for 15 min

Injection temperature: 200 °C

Detection temperature: 200 °C

Carrier gas: helium

Carrier gas flow rate: 1 ml/min

Volume injected: 0,1 μ l to 0,2 μ l

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 3526:1991

<https://standards.iteh.ai/catalog/standards/sist/5b2d2b1a-1114-4faa-bd3a-f37b876deb4d/iso-3526-1991>



α - and β -Thujene (when present)

Figure A.1

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This page intentionally left blank

[ISO 3526:1991](#)

<https://standards.iteh.ai/catalog/standards/sist/5b2d2b1a-1114-4faa-bd3a-f37b876deb4d/iso-3526-1991>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 3526:1991

<https://standards.iteh.ai/catalog/standards/sist/5b2d2b1a-1114-4faa-bd3a-f37b876deb4d/iso-3526-1991>

UDC 665.527.57

Descriptors: essential oils, sage, specifications.

Price based on 4 pages
