

---

# INTERNATIONAL STANDARD



# 3142

---

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

---

## Oil of clove bud

*Huile essentielle de clous de giroflier*

First edition — 1974-08-15

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 3142:1974

<https://standards.iteh.ai/catalog/standards/sist/abdc5bc1-11f8-4858-a0be-e0e38b0518b3/iso-3142-1974>

---

UDC 668.526.752.004.1

Ref. No. ISO 3142-1974 (E)

**Descriptors** : essential oils, clove bud, specifications, materials specifications.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3142 was drawn up by Technical Committee ISO/TC 54, *Essential oils*, and circulated to the Member Bodies in February 1973.

It has been approved by the Member Bodies of the following countries :

Australia	India	Thailand
Belgium	Italy	Turkey
Bulgaria	Japan	United Kingdom
Czechoslovakia	Netherlands	U.S.S.R.
Egypt, Arab Rep. of	New Zealand	
France	South Africa, Rep. of	

No Member Body expressed disapproval of the document.

This International Standard forms part of a series of ISO publications dealing with oils of clove. Other documents in the series are :

ISO 3141, *Oil of clove leaf*.<sup>1)</sup>

ISO 3143, *Oil of clove stem*.<sup>1)</sup>

<sup>1)</sup> At present at the stage of draft.

# Oil of clove bud

## iTeh STANDARD PREVIEW (standards.iteh.ai)

### 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies certain characteristics of oil of clove bud, with a view to facilitating the assessment of its quality. It does not apply to oil of Indonesian clove bud.

### 2 REFERENCES

ISO/R 210, *Essential oils – Packing.*

ISO/R 211, *Essential oils – Labelling and marking containers.*

ISO 212, *Essential oils – Sampling.*

ISO/R 279, *Determination of the density and relative density of essential oils.*

ISO/R 280, *Determination of the refractive index of essential oils.*

ISO/R 592, *Determination of the optical rotation of essential oils.*

ISO/R 875, *Determination of solubility of essential oils in ethanol.*

ISO 1272, *Determination of phenols content of Essential oils.*

### 3 DEFINITION

**oil of clove bud:** The oil obtained by steam distillation from the dried flower buds of *Syzygium aromaticum* (Linnaeus) Merril and Perry, syn : *Eugenia caryophyllus* (Sprengel) Bullock and Harrison.

### 4 REQUIREMENTS

#### 4.1 Appearance

Clear, mobile liquid, sometimes slightly viscous.

#### 4.2 Colour

From yellow to clear brown; in contact with iron the oil becomes dark purple-brown.

#### 4.3 Odour

Spicy, and characteristic of eugenol.

#### 4.4 Relative density at 20/20 °C

Minimum : 1,044

Maximum : 1,057

#### 4.5 Refractive index at 20 °C

Minimum : 1,528 0

Maximum : 1,538 0

#### 4.6 Optical rotation at 20 °C

Range – 1,5° to 0°.

#### 4.7 Solubility in 70 % (V/V) ethanol at 20 °C

The solubility in 70 % (V/V) ethanol at 20 °C shall be 1 volume in 2 volumes to give a clear solution.

## ISO 3142-1974 (E)

### 4.8 Phenols content

Minimum : 85 % (V/V)

Maximum : 93 % (V/V)

### 5 SAMPLING

See ISO 212.

Minimum volume of final sample : 50 ml.

### 6 METHODS OF TEST

#### 6.1 Relative density at 20/20 °C

See ISO/R 279.

#### 6.2 Refractive index at 20 °C

See ISO/R 280.

#### 6.3 Optical rotation at 20 °C

See ISO/R 592.

#### 6.4 Solubility in 70 % (V/V) ethanol at 20 °C

See ISO/R 875.

#### 6.5 Phenols content

See ISO 1272.

### 7 PACKING, LABELLING AND MARKING

See ISO/R 210 and ISO/R 211.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 3142:1974

<https://standards.iteh.ai/catalog/standards/sist/abdc5bc1-11f8-4858-a0be-e0e38b0518b3/iso-3142-1974>