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**Oil of bitter fennel (*Foeniculum vulgare*  
Mill. ssp. *vulgare* var. *vulgare*)**

*Huile essentielle de fenouil amer (Foeniculum vulgare Mill. ssp. vulgare  
var. vulgare)*



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## Foreword

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ISO 17412 was prepared by Technical Committee ISO/TC 54, *Essential oils*.

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# Oil of bitter fennel (*Foeniculum vulgare* Mill. ssp. *vulgare* var. *vulgare*)

## 1 Scope

This International Standard specifies certain characteristics of the oil of bitter fennel (*Foeniculum vulgare* Mill. ssp. *vulgare* var. *vulgare*), in order to facilitate assessment of its quality.

## 2 Normative references

The following referenced documents are indispensable for the application 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/TR 210, *Essential oils — General rules for packaging, conditioning and storage*

ISO/TR 211, *Essential oils — General rules for labelling and marking containers*

ISO 212, *Essential oils — Sampling*

ISO 279, *Essential oils — Determination of relative density at 20 °C — Reference method*

ISO 280, *Essential oils — Determination of refractive index*

ISO 592, *Essential oils — Determination of optical rotation*

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

ISO 1041, *Essential oils — Determination of freezing point*

ISO 11024-1, *Essential oils — General guidance on chromatographic profiles — Part 1: Preparation of chromatographic profiles for presentation in standards*

ISO 11024-2, *Essential oils — General guidance on chromatographic profiles — Part 2: Utilization of chromatographic profiles of samples of essential oils*

## 3 Terms and definitions

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

### 3.1

#### oil of bitter fennel

essential oil obtained by steam distillation, with or without subsequent rectification, of the fruits and aerial parts of *Foeniculum vulgare* Mill. ssp. *vulgare* var. *vulgare* of the Apiaceae family; some authors use the name *Foeniculum vulgare* Miller ssp. *vulgare* var. *amara*

NOTE For information on CAS number, see ISO/TR 21092.

## 4 Requirements

### 4.1 Appearance

<i>trans</i> -Anethole type	Phellandrene type
Clear liquid or crystalline mass	Mobile liquid

### 4.2 Colour

<i>trans</i> -Anethole type	Phellandrene type
Colourless to pale yellow liquid	Pale yellow to intense yellow liquid

### 4.3 Odour

<i>trans</i> -Anethole type	Phellandrene type
Characteristic, recalling that of anethole	Sweet, herbaceous, characteristic

### 4.4 Taste

Sweet with a bitter after-taste.