



Edition: BP 2025 (Ph. Eur. 11.6 update)

Refined Almond Oil



[General Notices](#)

(Ph. Eur. monograph 1064)

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DEFINITION

Fatty oil obtained from the ripe seeds of *Prunus dulcis* (Mill.) D.A. Webb var. *dulcis* or *Prunus dulcis* (Mill.) D.A. Webb var. *amara* (DC.) Buchheim or a mixture of both varieties by cold expression. It is then refined. A suitable antioxidant may be added.

CHARACTERS

Appearance

Pale yellow, clear liquid.

Solubility

Slightly soluble in ethanol (96 per cent), miscible with light petroleum.

[Relative density](#)

About 0.916.

It solidifies at about -18 °C.

IDENTIFICATION

A. Identification of fatty oils by thin-layer chromatography ([2.3.2](#)).

Results The chromatogram obtained is similar to the corresponding chromatogram shown in Figure 2.3.2.-1.

B. Composition of fatty acids (see Tests).

TESTS

Specific absorbance ([2.2.25](#))

0.2 to 6.0, determined at the absorption maximum at 270 nm.

To 0.100 g add [cyclohexane R](#) and dilute to 10.0 mL with the same solvent. Adapt the concentration of the solution so that the absorbance lies between 0.5 and 1.5, measured in a 1 cm cell.

Acid value (2.5.1)

Maximum 0.5, determined on 5.0 g.

Peroxide value (2.5.5, *Method A*)

Maximum 5.0.

Unsaponifiable matter (2.5.7)

Maximum 0.9 per cent, determined on 5.0 g.

Composition of fatty acids (2.4.22, *Method A*)

Use the mixture of calibrating substances in Table 2.4.22.-3.

Composition of the fatty-acid fraction of the oil:

- *saturated fatty acids of chain length less than C₁₆*: maximum 0.1 per cent;
- [palmitic acid](#): 4.0 per cent to 9.0 per cent;
- [palmitoleic acid](#): maximum 0.8 per cent;
- *margaric acid*: maximum 0.2 per cent;
- [stearic acid](#): maximum 3.0 per cent;
- [oleic acid](#): 62.0 per cent to 86.0 per cent;
- [linoleic acid](#): 20.0 per cent to 30.0 per cent;
- [linolenic acid](#): maximum 0.4 per cent;
- *arachidic acid*: maximum 0.2 per cent;
- *eicosenoic acid*: maximum 0.3 per cent;
- *behenic acid*: maximum 0.2 per cent;
- *erucic acid*: maximum 0.1 per cent.

Sterols (2.4.23)

Composition of the sterol fraction of the oil:

- [cholesterol](#): maximum 0.7 per cent;
- *campesterol*: maximum 5.0 per cent;
- [stigmasterol](#): maximum 4.0 per cent;
- [β-sitosterol](#): 73.0 per cent to 87.0 per cent;
- *Δ⁵-avenasterol*: minimum 5.0 per cent;
- *Δ⁷-stigmastenol*: maximum 3.0 per cent;
- *Δ⁷-avenasterol*: maximum 3.0 per cent;
- *brassicasterol*: maximum 0.3 per cent.

Water (2.5.32)

STORAGE

In a well-filled container, protected from light.

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