

Status: Currently Official on 14-Feb-2025
Official Date: Official as of 01-Jan-2018
Document Type: NF Monographs
DocId: GUID-D602C7B9-4BEC-4E0A-A222-9266B77BC8C6_3_en-US
DOI: https://doi.org/10.31003/USPNF_M954_03_01
DOI Ref: 1w4gw

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Canola Oil

Low erucic acid rapeseed oil;
LEAR oil.

DEFINITION

Canola Oil is the refined fixed oil obtained from the seeds of *Brassica napus* or *Brassica campestris* (Fam. Cruciferae). A suitable antioxidant may be added.

IDENTIFICATION

• **A. IDENTITY BY FATTY ACID COMPOSITION**

Analysis: Proceed as directed in the test for [Fats and Fixed Oils \(401\)](#), [Procedures, Fatty Acid Composition](#).

Acceptance criteria: Meets the composition profile of fatty acids in [Table 1](#)

• **B. IDENTITY BY TRIGLYCERIDE PROFILE**

Analysis: Proceed as directed in [Identification of Fixed Oils by Thin-Layer Chromatography \(202\)](#), [Identification, Method I](#) or [Method II](#).

Acceptance criteria: Meets the requirements in the chapter

SPECIFIC TESTS

- **FATS AND FIXED OILS (401)**, [Procedures, Fatty Acid Composition](#): Canola Oil exhibits the composition profile of fatty acids in [Table 1](#).

Table 1

Carbon-Chain Length	Number of Double Bonds	Percentage (%)
<14	—	<0.1
14	0	<0.2
16	0	<6.0
16	1	<1.0
18	0	<2.5
18	1	>50
18	2	<40
18	3	<14
20	0	<1.0
20	1	<2.0
22	0	<0.5
22 ^a	1	≤2.0
24	0	<0.2
24	1	<0.2

- ^a Erucic acid.
- **LIMIT OF ERUCIC ACID:** NMT 2.0%, as determined in the test for [Fats and Fixed Oils \(401\), Procedures, Fatty Acid Composition](#)
 - **SPECIFIC GRAVITY (841):** 0.906–0.920
 - **FATS AND FIXED OILS (401), Procedures, Acid Value:** NMT 6.0
 - **FATS AND FIXED OILS (401), Procedures, Iodine Value:** 110–126
 - **FATS AND FIXED OILS (401), Procedures, Peroxide Value:** NMT 10.0
 - **FATS AND FIXED OILS (401), Procedures, Saponification Value:** 178–193
 - **FATS AND FIXED OILS (401), Procedures, Unsaponifiable Matter:** NMT 1.5%
 - **REFRACTIVE INDEX (831):** 1.465–1.467 at 40°

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight containers, and avoid contact with metals. Fill to the top or flush partially filled containers with nitrogen. No storage requirements specified.
- **LABELING:** Label it to indicate the name and concentration of any added antioxidant.

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
CANOLA OIL	Documentary Standards Support	CE2020 Complex Excipients

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. PF 42(5)

Current DocID: GUID-D602C7B9-4BEC-4E0A-A222-9266B77BC8C6_3_en-US
Previous DocID: GUID-D602C7B9-4BEC-4E0A-A222-9266B77BC8C6_1_en-US
DOI: https://doi.org/10.31003/USPNF_M954_03_01
DOI ref: [1w4gw](#)