

Status: Currently Official on 14-Feb-2025
Official Date: Official as of 01-Jan-2018
Document Type: NF Monographs
DocId: GUID-1DD79BA2-5968-4D8A-A87C-CE540253313B_3_en-US
DOI: https://doi.org/10.31003/USPNF_M12450_03_01
DOI Ref: qa6x8

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Caraway Oil

DEFINITION

Caraway Oil is the volatile oil distilled from the dried, ripe fruit of *Carum carvi* L. (Fam. Apiaceae). It contains NLT 50.0% of *d*-carvone (C₁₀H₁₄O).

ASSAY

PROCEDURE

Sample: 10 mL of Caraway Oil

Analysis: Transfer the *Sample* to a cassia flask, and add 50 mL of a saturated solution of sodium sulfite that has been made neutral to 2 drops of phenolphthalein TS by means of a saturated sodium bisulfite solution. Heat the flask in boiling water, and shake it repeatedly, neutralizing the mixture from time to time by adding a few drops of the saturated sodium bisulfite solution. When no coloration appears upon the addition of a few more drops of phenolphthalein TS and heating for 15 min, cool the mixture to room temperature. When the liquids have separated more completely, add a sufficient volume of the saturated sodium bisulfite solution to raise the lower level of the oily layer to the graduated portion of the neck of the flask.

Acceptance criteria: The volume of the residual oily liquid does not exceed 5 mL, indicating the presence of NLT 50.0% of *d*-carvone (C₁₀H₁₄O) in the portion of Oil taken.

SPECIFIC TESTS

- SOLUBILITY IN 80% ALCOHOL:** One volume dissolves in 8 volumes of 80% alcohol.
- SPECIFIC GRAVITY (841):** 0.900–0.910
- OPTICAL ROTATION, Angular Rotation(781A):** +70° to +80°
- REFRACTIVE INDEX (831):** 1.484–1.488 at 20°

ADDITIONAL REQUIREMENTS

- PACKAGING AND STORAGE:** Preserve in tight, light-resistant containers.
- LABELING:** The label states the Latin binomial and, following the official name, the part of the plant source from which the article was derived.

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

Topic/Question	Contact	Expert Committee
CARAWAY OIL	Nam-Cheol Kim Scientific Liaison	BDSHM2020 Botanical Dietary Supplements and Herbal Medicines

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:
Pharmacopeial Forum: Volume No. PF 27(4)

Current DocID: GUID-1DD79BA2-5968-4D8A-A87C-CE540253313B_3_en-US
Previous DocID: GUID-1DD79BA2-5968-4D8A-A87C-CE540253313B_1_en-US
DOI: https://doi.org/10.31003/USPNF_M12450_03_01
DOI ref: [qa6x8](#)