

Delete the following:

- **HEAVY METALS, Method II (231)**
Analysis: Use a platinum crucible for the ignition, and use nitric acid in place of sulfuric acid to wet the test specimen.
Acceptance criteria: NMT 40 ppm (Official 1-Jan-2018)

SPECIFIC TESTS

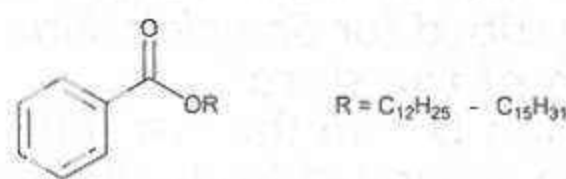
- **MICROBIAL ENUMERATION TESTS (61) and TESTS FOR SPECIFIED MICROORGANISMS (62):** The total aerobic microbial count does not exceed 2×10^2 cfu/g, and the tests for *Salmonella* species and *Escherichia coli* are negative.
- **PH (791):** 1.5–3.5, in a 3-in-100 dispersion in water
- **LOSS ON DRYING (731):** Dry a sample at 105° for 4 h; it loses NMT 15.0% of its weight.
- **ARTICLES OF BOTANICAL ORIGIN, Total Ash (561)**
Sample: 4 g of Alginic Acid
Analysis: Proceed as directed in the chapter, carefully igniting the *Sample* in a tared platinum dish, until the residue is thoroughly carbonized (5 min). Then ignite in a muffle furnace at a temperature of $800 \pm 25^\circ$ until the carbon is completely burned off (20–35 min).
Acceptance criteria: NMT 4.0% of ash
- **FATS AND FIXED OILS, Acid Value (401)**
Sample: 1 g of Alginic Acid
Analysis: Suspend the *Sample* in a mixture of 50 mL of water and 30.0 mL of calcium acetate solution (11 in 250). Shake thoroughly, allow the mixture to stand for 1 h, and add phenolphthalein TS. Titrate the liberated acetic acid with 0.1 N sodium hydroxide VS. Perform a blank determination, and calculate the *Acid Value*:

$$\text{Result} = [(V_S - V_B) \times N \times F] / W$$

- V_S = volume of 0.1 N sodium hydroxide VS consumed in the titration of the *Sample* (mL)
 V_B = volume of 0.1 N sodium hydroxide VS consumed in the titration of the blank (mL)
 N = normality of sodium hydroxide VS (mEq/mL)
 F = equivalency factor of potassium hydroxide, 56.11 (mg/mEq)
 W = weight of Alginic Acid taken (g)
 Acceptance criteria: NLT 230 on the dried basis

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in well-closed containers.

Alkyl (C12–15) Benzoate

$C_{20}H_{32}O_2$ 304.47 (average)
 Benzoic acid, C12–15 alkyl ester [68411-27-8].

DEFINITION

Alkyl (C12–15) Benzoate consists of esters of a mixture of C12 to C15 primary and branched alcohols and benzoic acid.

IDENTIFICATION

- **A.** Infrared absorption spectrum, obtained by spreading a capillary film of it between sodium chloride plates, exhibits maxima at 2800 cm^{-1} (broad); 2950 cm^{-1} (broad); 1730 cm^{-1} (medium, sharp); 1270 cm^{-1} (medium, sharp); and 710 cm^{-1} (medium, sharp).

IMPURITIES

- **RESIDUE ON IGNITION (281):** NMT 0.5%

SPECIFIC TESTS

- **WATER DETERMINATION, Method I (921):** NMT 0.3%
- **SPECIFIC GRAVITY (841):** 0.915–0.935
- **FATS AND FIXED OILS, Acid Value (401):** NMT 0.5
- **REFRACTIVE INDEX (831):** 1.483–1.487 at 20°
- **FATS AND FIXED OILS, Saponification Value (401)**
Sample: 2 g of Alkyl (C12–15) Benzoate
Analysis: Transfer the *Sample* to a 200-mL flask. Proceed as directed in the chapter, except use 50.0 mL of 0.5 N alcoholic potassium hydroxide VS instead of 25.0 mL, maintaining reflux for 2 h instead of 30 min, and rinsing the reflux condenser with 25 mL of water after the reflux period.
Acceptance criteria: 169–182
- **VISCOSITY—ROTATIONAL METHODS (912)**
Sample: 500 mL
Analysis: Transfer the *Sample* to a 600-mL tall-form beaker, and adjust the temperature to $25 \pm 0.1^\circ$. Using a suitable rotational viscometer with a spindle having a cylinder 5.63 cm in diameter and 2.25 cm in height attached to a shaft 0.32 cm in diameter, the distance from the top of the cylinder to the lower tip of the shaft being 2.91 cm, and the immersion depth being 6.11 cm (No. 1 spindle), operate the viscometer at 100 rpm for 60 s, accurately timed, and record the scale reading. Convert the scale reading to centipoises by multiplying by the constant for the spindle and speed used.
Acceptance criteria: The average of three viscosities obtained is NMT 100 centipoises.

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight, light-resistant containers.

Almond Oil

Almond Oil [8007-69-0].

DEFINITION

Almond Oil is the refined fixed oil obtained by expression from the kernels of varieties of *Prunus dulcis* (Miller) D.A. Webb (formerly known as *Prunus amygdalus* Batsch) (Fam. Rosaceae), except for *Prunus dulcis* (Miller) D.A. Webb var. amara (De Candolle) Focke. It may contain suitable antioxidants.

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, Acid Value:** NMT 0.5
- **FATS AND FIXED OILS (401), Procedures, Fatty Acid Composition:** Almond Oil exhibits the composition profiles of fatty acids in *Table 1*.