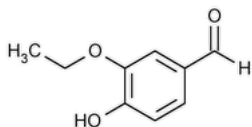


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Ethyl Vanillin



$C_9H_{10}O_3$ 166.17

Benzaldehyde, 3-ethoxy-4-hydroxy-

3-Ethoxy-4-hydroxybenzaldehyde CAS RN®: 121-32-4.

DEFINITION

Ethyl Vanillin, dried over phosphorus pentoxide for 4 h, contains NLT 98.0% and NMT 101.0% of $C_9H_{10}O_3$.

IDENTIFICATION

Change to read:

- **A.** [▲ SPECTROSCOPIC IDENTIFICATION TESTS \(197\), Infrared Spectroscopy: 197K ▲](#) (CN 1-MAY-2020)

Change to read:

- **B.** [▲ SPECTROSCOPIC IDENTIFICATION TESTS \(197\), Ultraviolet-Visible Spectroscopy: 197U ▲](#) (CN 1-MAY-2020)

Sample solution: 8 µg/mL in methanol

Acceptance criteria: Meets the requirements

ASSAY

PROCEDURE

Sample: 300 mg of Ethyl Vanillin (previously dried)

Titrimetric system

(See [Titrimetry \(541\)](#).)

Mode: Direct titration

Titrant: 0.1 N sodium methoxide VS

Blank: 50 mL of dimethylformamide, accurately measured

Endpoint detection: Visual

Analysis: Transfer the *Sample solution* to a 125-mL conical flask, and dissolve in 50 mL of dimethylformamide. Add thymol blue TS and titrate, using a magnetic stirrer and taking precautions against the absorption of atmospheric carbon dioxide. Perform a blank determination.

Calculate the percentage of ethyl vanillin ($C_9H_{10}O_3$) in the *Sample* taken:

$$\text{Result} = \{[(V_S - V_B) \times N \times F] / W\} \times 100$$

V_S = *Titrant* volume consumed by the *Sample* (mL)

V_B = *Titrant* volume consumed by the *Blank* (mL)

N = actual normality of the *Titrant* (mEq/mL)

F = equivalency factor, 166.2 mg/mEq

W = *Sample* weight (mg)

Acceptance criteria: 98.0%–101.0% on the previously dried basis

IMPURITIES

- [RESIDUE ON IGNITION \(281\)](#): NMT 0.1%

SPECIFIC TESTS

- [MELTING RANGE OR TEMPERATURE \(741\)](#): 76°–78°

- **Loss on Drying (731):** Dry a sample over phosphorus pentoxide for 4 h: it loses NMT 1.0% of its weight.

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight, light-resistant containers.
- **USP REFERENCE STANDARDS (11).**
[USP Ethyl Vanillin RS](#)

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

Topic/Question	Contact	Expert Committee
ETHYL VANILLIN	Documentary Standards Support	SE2020 Simple Excipients

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

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