

Change to read:

- **USP REFERENCE STANDARDS** <11>
USP Acepromazine Maleate RS
• (CN 1: May 2013)

Acepromazine Maleate Tablets

DEFINITION
Acepromazine Maleate Tablets contain NLT 90.0% and NMT 110.0% of the labeled amount of acepromazine maleate (C₁₉H₂₂N₂OS · C₄H₄O₄).
Throughout the following procedures, protect samples, the USP Reference Standard, and solutions containing them, by conducting the procedures without delay, under subdued light, or using low-actinic glassware.

IDENTIFICATION

- **A. INFRARED ABSORPTION** <197K>
Sample: To a quantity of powdered Tablets, equivalent to 20 mg of acepromazine maleate, add 2 mL of water and 3 mL of 2 N sodium hydroxide, and extract with two 5-mL portions of cyclohexane. Combine the cyclohexane extracts, and evaporate to dryness under vacuum, using gentle heat if necessary.
Acceptance criteria: Meet the requirements
- **B.** The retention time of the major peak of the Sample solution corresponds to that of the Standard solution, as obtained in the Assay.

ASSAY

- **PROCEDURE**
Buffer: Add 6 mL of triethylamine to 700 mL of water, and adjust with phosphoric acid to a pH of 2.5.
Mobile phase: Acetonitrile and Buffer (300:700)
Standard stock solution: 1 mg/mL of USP Acepromazine Maleate RS in 0.05 N hydrochloric acid
Standard solution: 0.1 mg/mL of USP Acepromazine Maleate RS in water from Standard stock solution
Sample stock solution: Transfer NLT 10 Tablets to a 200-mL volumetric flask, add 100 mL of 0.05 N hydrochloric acid, and sonicate for 10 min. Shake by mechanical means for 30 min, and dilute with 0.05 N hydrochloric acid to volume.
Sample solution: Nominally 0.1 mg/mL of Acepromazine Maleate in water from Sample stock solution. Pass a portion of this solution through a filter of 0.5-µm or finer pore size.
Chromatographic system
(See Chromatography <621>, System Suitability.)
Mode: LC
Detector: UV 280 nm
Column: 4-mm × 15-cm; 5-µm packing L7
Flow rate: 1 mL/min
Injection volume: 10 µL
System suitability
Sample: Standard solution
Suitability requirements
Column efficiency: NLT 1500 theoretical plates
Tailing factor: NMT 2.5
Relative standard deviation: NMT 2.0%
Analysis
Samples: Standard solution and Sample solution
Calculate the percentage of acepromazine maleate (C₁₉H₂₂N₂OS · C₄H₄O₄) in the portion of Tablets taken:

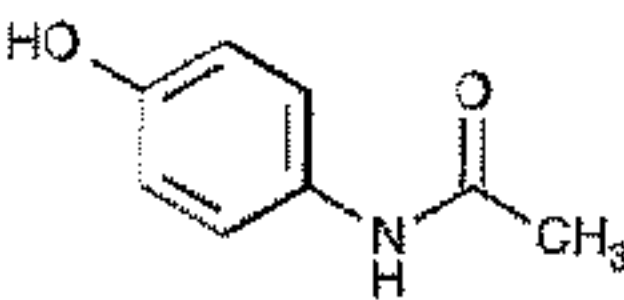
Result = (r_U/r_S) × (C_S/C_U) × 100

- r_U = peak area from the Sample solution
- r_S = peak area from the Standard solution
- C_S = concentration of USP Acepromazine Maleate RS in the Standard solution (mg/mL)
- C_U = nominal concentration of the Sample solution (mg/mL)
- Acceptance criteria: 90.0%–110.0%

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight, light-resistant containers, and store at controlled room temperature.
- **LABELING:** Label the Tablets to indicate that they are for veterinary use only.
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USP Acepromazine Maleate RS

Acetaminophen



C₈H₉NO₂ 151.16
Acetamide, N-(4-hydroxyphenyl)-;
4'-Hydroxyacetanilide [103-90-2].

DEFINITION

Acetaminophen contains NLT 98.0% and NMT 102.0% of acetaminophen (C₈H₉NO₂), calculated on the dried basis.

IDENTIFICATION

- **A. INFRARED ABSORPTION** <197K>
- **B.** The retention time of the major peak of the Sample solution corresponds to that of the Standard solution, as obtained in the Assay.

ASSAY

- **PROCEDURE**
Use low-actinic glassware for preparation of the Sample solution.
Solution A: 1.7 g/L of monobasic potassium phosphate and 1.8 g/L of dibasic sodium phosphate, anhydrous
Solution B: Methanol
Mobile phase: See Table 1.

Table 1

Time (min)	Solution A (%)	Solution B (%)
0.0	99	1
0.0	99	1
0.0	99	1
0.0	99	1
0.0	99	1

Standard solution: 0.1 mg/mL of USP Acetaminophen RS in methanol
Sample solution: 0.1 mg/mL of Acetaminophen in methanol