

Calcium Acetate Capsules

DEFINITION

Calcium Acetate Capsules contain NLT 90.0% and NMT 110.0% of the labeled amount of calcium acetate ($C_4H_6CaO_4$).

IDENTIFICATION

- **A.** The retention time of the calcium peak of the *Sample solution* corresponds to that of the *Standard solution*, as obtained in the *Assay*.
- **B.** **IDENTIFICATION TESTS—GENERAL** (191), *Chemical Identification Tests, Acetate*
Sample solution: 67 mg/mL of calcium acetate from Capsule contents
Acceptance criteria: Meet the requirements for test *B*

ASSAY

• PROCEDURE

Solution A: 0.75 mM [dipicolinic acid](#) and 1.7 mM [nitric acid](#) in [water](#). [NOTE—Warm [water](#) may be required to dissolve [dipicolinic acid](#).]

Mobile phase: [Acetone](#) and *Solution A* (10:90). Pass through a suitable filter of 0.2- μ m pore size.

Standard solution: 0.08 mg/mL of [USP Calcium Acetate RS](#) in [water](#)

Sample stock solution: Nominally 6.7 mg/mL of calcium acetate prepared as follows. Transfer an appropriate portion of the contents of NLT 20 Capsules to a suitable volumetric flask. Add [water](#) to about 40% of the final volume of the flask and sonicate for 20 min with intermittent shaking. Dilute with [water](#) to volume. Pass through a suitable filter of 0.45- μ m pore size.

Sample solution: Nominally 0.08 mg/mL of calcium acetate in [water](#) from the *Sample stock solution*

Chromatographic system

(See [Chromatography](#) (621), *System Suitability*.)

Mode: Ion chromatography

Detector: Conductivity

Column: 4.0-mm \times 15-cm; 5- μ m packing [L76](#)

Column temperature: 35°

Flow rate: 0.9 mL/min

Injection volume: 10 μ L

Run time: NLT 1.5 times the retention time of the calcium peak

System suitability

Sample: *Standard solution*

Suitability requirements

Column efficiency: NLT 1000 theoretical plates

Relative standard deviation: NMT 2.0%

Analysis

Samples: *Standard solution* and *Sample solution*

