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Ammonium Phosphate

$(\text{NH}_4)_2\text{HPO}_4$ 132.06
Phosphoric acid, diammonium salt;
Diammonium phosphate CAS RN®: 7783-28-0.

DEFINITION

Ammonium Phosphate contains NLT 96.0% and NMT 102.0% of $(\text{NH}_4)_2\text{HPO}_4$.

IDENTIFICATION

- **A. IDENTIFICATION TESTS—GENERAL, [Ammonium \(191\)](#):** A solution (1 in 20) meets the requirements.
- **B. IDENTIFICATION TESTS—GENERAL, [Phosphate \(191\)](#):** A solution (1 in 20) meets the requirements.

ASSAY

PROCEDURE

Sample: 600 mg of Ammonium Phosphate
Titrimetric system
(See [Titrimetry \(541\)](#).)
Mode: Direct titration
Titrant: 0.1 N sulfuric acid VS
Endpoint detection: potentiometric
Analysis: Dissolve the *Sample* in 40 mL of water, and titrate with 0.1 N sulfuric acid VS to a pH of 4.6. Each mL of 0.1 N sulfuric acid is equivalent to 13.21 mg of $(\text{NH}_4)_2\text{HPO}_4$.
Acceptance criteria: 96.0%–102.0%

IMPURITIES

- **CHLORIDE AND SULFATE, [Chloride \(221\)](#):** A 1.0-g portion shows no more chloride than corresponds to 0.40 mL of 0.020 N hydrochloric acid (0.03%).
- **CHLORIDE AND SULFATE, [Sulfate \(221\)](#):** A 0.20-g portion shows no more sulfate than corresponds to 0.30 mL of 0.020 N sulfuric acid (0.15%).

Change to read:

- **▲ [ARSENIC \(211\), \[Procedures, Procedure 1\]\(#\)](#) ▲ (CN 1-JUN-2023):** NMT 3 ppm

SPECIFIC TESTS

- **[pH \(791\)](#):** 7.6–8.2, in a solution (1 in 100)

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight containers.

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

Topic/Question	Contact	Expert Committee
AMMONIUM PHOSPHATE	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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