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Sodium Ammonium Phosphate Tetrahydrate

(*Microcosmic Salt*), $\text{NaNH}_4\text{HPO}_4 \cdot 4\text{H}_2\text{O}$ 209.07—Colorless crystals or white granules. Freely soluble in water; insoluble in alcohol. Effloresces in air and loses ammonia.

• INSOLUBLE MATTER AND AMMONIUM HYDROXIDE PRECIPITATE

Analysis: Dissolve 10 g in 100 mL of water, add 10 mL of ammonia TS, and heat on a steam bath for 1 hr. If any precipitate is formed, filter, wash well with water, and ignite.

Acceptance criteria: NMT 1 mg (0.01%)

Chloride (Reagent test): One g shows NMT 0.02 mg of Cl (0.002%).

• HEAVY METALS

Analysis: Dissolve 3 g in 25 mL of water, add 15 mL of 1 N sulfuric acid, then add 10 mL of hydrogen sulfide TS.

Acceptance criteria: Any brown color developed in 1 min is not darker than that of a control containing 3 mL of Standard lead solution TS and 0.5 mL of 1 N sulfuric acid (0.001%).

• NITRATE

Analysis: Dissolve 1 g in 10 mL of water, add 0.1 mL of indigo carmine TS, then add, with stirring, 10 mL of sulfuric acid.

Acceptance criteria: Blue color persists for 10 min (about 0.005%).

• SULFATE (Reagent test, *Method II*)

Analysis: Dissolve 10 g in 100 mL of water, add 5 mL of hydrochloric acid, and filter if necessary.

Acceptance criteria: NMT 5 mg (0.02%)

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

Topic/Question	Contact	Expert Committee
SODIUM AMMONIUM PHOSPHATE TETRAHYDRATE	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

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