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Aromatic Ammonia Spirit

DEFINITION

Aromatic Ammonia Spirit is a hydroalcoholic solution that contains, in each 100 mL, NLT 1.7 g and NMT 2.1 g of total ammonia (NH₃) and Ammonium Carbonate corresponding to NLT 3.5 g and NMT 4.5 g of ammonium carbonate [(NH₄)₂CO₃].

ASSAY

• **TOTAL AMMONIA (NH₃)**

Sample: 10.0 mL

Titrimetric system

(See [Titrimetry \(541\)](#), [Residual Titrations](#).)

Mode: Residual titration

Titrant: 0.5 N sodium hydroxide VS

Analysis: Transfer the *Sample* to a 250-mL conical flask containing 50 mL of water. Add 30.0 mL of 0.5 N sulfuric acid VS, and boil until the solution becomes clear. Cool, add methyl red TS, and titrate the excess acid with *Titrant*. Perform a blank determination. Each mL of 0.5 N sulfuric acid is equivalent to 8.515 mg of ammonia (NH₃).

• **AMMONIUM CARBONATE**

Sample: 10.0 mL

Titrimetric system

(See [Titrimetry \(541\)](#), [Residual Titrations](#).)

Mode: Residual titration

Titrant: 0.5 N sulfuric acid VS

Analysis: Transfer the *Sample* to a 300-mL flask. Add 30 mL of 0.5 N sodium hydroxide, and boil the mixture, replacing the water lost by evaporation, until the vapors no longer turn moistened red litmus paper blue. Cool, dilute with 100 mL of cold, carbon dioxide-free water, add 6 drops of phenolphthalein TS, then add just enough 0.5 N sulfuric acid VS to discharge the color of the phenolphthalein. Add methyl orange TS, and titrate with *Titrant*. Perform a blank determination. Each mL of *Titrant* consumed in the titration with methyl orange TS is equivalent to 48.04 mg of ammonium carbonate [(NH₄)₂CO₃].

Acceptance criteria: In each 100 mL, NLT 1.7 g and NMT 2.1 g of total ammonia (NH₃) and Ammonium Carbonate corresponding to NLT 3.5 g and NMT 4.5 g of ammonium carbonate [(NH₄)₂CO₃]

OTHER COMPONENTS

- [ALCOHOL DETERMINATION, Method I \(611\)](#): 62.0%–68.0%

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight, light-resistant containers at a temperature not exceeding 30°.

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

Topic/Question	Contact	Expert Committee
AROMATIC AMMONIA SPIRIT	Documentary Standards Support	SM52020 Small Molecules 5

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:
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