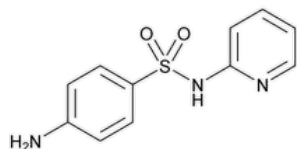


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Sulfapyridine



$C_{11}H_{11}N_3O_2S$ 249.29

Benzenesulfonamide, 4-amino-*N*-2-pyridinyl-;

*N*¹-2-Pyridylsulfanilamide CAS RN[®]: 144-83-2; UNII: Y5V2N1KE8U.

DEFINITION

Sulfapyridine contains NLT 99.0% and NMT 100.5% of sulfapyridine ($C_{11}H_{11}N_3O_2S$), calculated on the dried basis.

IDENTIFICATION

- **A.** [SPECTROSCOPIC IDENTIFICATION TESTS \(197\)](#), [Infrared Spectroscopy: 197K](#)
- **B.**

Sample solution: Add 5 mL of 3 N hydrochloric acid to 0.1 g of Sulfapyridine.

Analysis: Boil gently the *Sample solution* for 5 min, then cool in an ice bath. Add 4 mL of sodium nitrite solution (1 in 100), dilute with water to 10 mL, and place the mixture in the ice bath for 10 min. To 5 mL of the cooled mixture add a solution of 50 mg of 2-naphthol in 2 mL of sodium hydroxide solution (1 in 10).

Acceptance criteria: An orange-red precipitate is formed, and it darkens on standing.

ASSAY

- [NITRITE TITRATION \(451\)](#): Each mL of 0.1 N sodium nitrite is equivalent to 24.93 mg of sulfapyridine ($C_{11}H_{11}N_3O_2S$).

Acceptance criteria: 99.0%–100.5% on the dried basis

IMPURITIES

- [RESIDUE ON IGNITION \(281\)](#): NMT 0.1%

Change to read:

- [SELENIUM \(291\)](#), [Procedures, Procedure 1](#) ▲ (CN 1-JUN-2023)

Sample: 200 mg

Acceptance criteria: 30 ppm

SPECIFIC TESTS

- [MELTING RANGE OR TEMPERATURE \(741\)](#): 190°–193°

ACIDITY

Sample: 2.0 g

Analysis: Digest the *Sample* with 100 mL of water at 70° for 5 min, cool at once to 20°, and filter. To 25.0 mL of the filtrate add 2 drops of phenolphthalein TS, and titrate with 0.10 N sodium hydroxide.

Acceptance criteria: NMT 0.20 mL is required for neutralization.

- [LOSS ON DRYING \(731\)](#)

Analysis: Dry at 105° for 2 h.

Acceptance criteria: NMT 0.5%

CLARITY AND COLOR OF SOLUTION

Sample solution: 1.0 g in a mixture of 20 mL of water and 5 mL of 1 N sodium hydroxide

Acceptance criteria: The *Sample solution* is clear and not more deeply colored than pale yellow.

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in well-closed, light-resistant containers.
- **USP REFERENCE STANDARDS (11).**
[USP Sulfapyridine RS](#)

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

Topic/Question	Contact	Expert Committee
SULFAPYRIDINE	Documentary Standards Support	SM12020 Small Molecules 1
REFERENCE STANDARD SUPPORT	RS Technical Services RSTECH@usp.org	SM12020 Small Molecules 1

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

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