



Material No.: 4935-06 Batch No.: 24C2261064

Manufactured Date: 2023-10-29 Expiration Date: 2026-10-28 Release Date: 2024-04-12 Revision No.: 0

## Certificate of Analysis

Meets B.P. Chemical Specifications, Meets J.P. Chemical Specifications, Meets U.S.P Requirements, Meets E.P. Chemical Specifications, GMP Manufactured Product

| Test   | Specification  | Result      |
|--|----------------|-------------|
| USP - Assay (C6H9N3O2) (dried basis)   | 98.5 - 101.5 % | 100.5 %     |
| USP – Identification   | Passes Test    | Passes Test |
| USP – Specific Rotation [Å] <sup>2</sup> 5 ^D (+)  | 12.6 - 14.0 °  | 13.0 °      |
| USP – pH   | 7.0 - 8.5      | 7.7         |
| USP – Loss on Drying at 105°C  | ≤ 0.2 %        | < 0.1 %     |
| USP – Residue on Ignition  | ≤ <b>0.4</b> % | < 0.1 %     |
| USP – Chloride (Cl)  | ≤ 0.05 %       | < 0.05 %    |
| USP - Sulfate (SO <sub>4</sub> )   | ≤ 0.03 %       | < 0.03 %    |
| USP – Iron (Fe)  | ≤ 0.003 %      | < 0.003 %   |
| USP - Related Compounds - Individual Impurities  | ≤ 0.5 %        | < 0.5 %     |
| USP - Related Compounds - Total Impurities   | ≤ 2.0 %        | < 2.0 %     |
| EP/BP - Assay (C <sub>6</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> ) (dried basis) | 98.5 - 101.0 % | 99.7 %      |
| EP/BP – Identification A   | Passes Test    | Passes Test |
| EP/BP - Identification B   | Passes Test    | Passes Test |
| EP/BP - Appearance of Solution   | Passes Test    | Passes Test |
| $EP/BP$ – Specific Rotation [Å] $^{2o}$ ^D (+)   | 11.4 - 12.4 °  | 11.8 °      |
| EP/BP-Ninhydrin-Positive Substances-Each   | ≤ 0.2 %        | < 0.2 %     |
| EP/BP-Ninhydrin-Positive Substances-Total Impurities                                       | ≤ 0.5 %        | < 0.5 %     |
| EP/BP - Chloride (Cl)  | ≤ 200 ppm      | < 200 ppm   |
| EP/BP - Sulfate (SO <sub>4</sub> )   | ≤ 300 ppm      | < 300 ppm   |
| EP/BP – Ammonium (NH <sub>4</sub> )  | ≤ 0.02 %       | < 0.02 %    |
| EP/BP – Iron (Fe)  | ≤ 10 ppm       | < 10 ppm    |
| EP/BP – Loss on Drying   | ≤ 0.5 %        | < 0.1 %     |
| EP/BP – Ash (sulfated)   | ≤ 0.1 %        | < 0.1 %     |
| Endotoxin Concentration, IU/mg ,For Information Only                                       |                | < 0.001     |
| JP – Assay (C6H9N3O2) (dried basis)  | 99.0 - 101.0 % | 100.5 %     |
| JP – Ammonium (NH4)  | ≤ 0.02 %       | < 0.02 %    |
| JP – Chloride (CI)   | ≤ 0.021 %      | < 0.021 %   |

>>> Continued on page 2 >>>





Material No.: 4935-06 Batch No.: 24C2261064

| Test                               | Specification | Result      |
|------------------------------------|---------------|-------------|
| JP – Clarity and Color of Solution | Passes Test   | Passes Test |
| JP – Heavy Metals (as Pb)          | ≤ 10 ppm      | < 10 ppm    |
| JP – Iron (Fe)                     | ≤ 10 ppm      | < 10 ppm    |
| JP – Identification                | Passes Test   | Passes Test |
| JP – Loss on Drying at 105°C       | ≤ 0.30 %      | < 0.10 %    |
| JP- Optical Rotation [Å]²º^D (+)   | 11.8 – 12.8 ° | 12.4 °      |
| JP – Related Substances            | Passes Test   | Passes Test |
| JP – pH                            | 7.0 – 8.5     | 7.7         |
| JP – Residue on Ignition           | ≤ 0.1 %       | < 0.1 %     |
| JP – Sulfate (SO4)                 | ≤ 0.028 %     | < 0.028 %   |

GMP Manufactured Product Bulk Pharmaceutical Chemical

CAUTION: For Manufacturing, processing or repackaging

No Class 1,2,3 or other solvents are used or produced in the manufacturing or purification of the product. Elemental Impurities (USP (232), EP 5.20) – Information on elemental impurities for this product is available on the associated Product Regulatory Data Sheet and elemental impurity profile report.

Storage Condition: Store in airtight container.

Country of Origin: China

Packaging Site: Paris Mfg Ctr & DC

Manufacturer: P0005111

Manufacturer source batch: 23102660



Sr. Manager, Quality Assurance