

## **Test Report**

| Product information                      |  |                                |               |
|--|--|--------------------------------|---------------|
| Product name Spermidine trihydrochloride |  |                                |               |
| Batch number                             | ZLX230914  | CAS#                           | 334-50-9      |
| Date of manufacture                      | On September 14,2023   | Quality<br>Guarantee<br>period | 24 Months     |
| Yieldly                                  | China  |                                |               |
| Clauses and subclauses                   | parameter  | Specificatio<br>n              | test method   |
| Basis                                    |  |                                |               |
| Purity                                   | ≥98.0%   | 99. 05%                        | HPLC          |
| Product indicators                       |  |                                |               |
| Ingredient                               | The HNMR testing is qualified                                | accord with                    | HNMR          |
| Appearance                               | White to rice-white powder                                   | accord with                    | visualization |
| Solubility                               | soluble in water   | accord with                    | self testing  |
| Loss on drying                           | ≤2.0%  | 0. 90%                         | self testing  |
| Burning residue                          | ≤0.2%  | 0.05%                          | self testing  |
| Residual solvent                         | The methanol does not exceed 3,000 ppm                       | accord with                    | ChP           |
| Heavy metal residue                      |  |                                |               |
| Pb lead                                  | <0.5ppm  | accord with                    | self testing  |
| As arsenic                               | ≤0.5ppm  | accord with                    | self testing  |
| Cd cadmium                               | ≤0.5ppm  | accord with                    | self testing  |
| Hg mercury                               | ≤1.5ppm  | accord with                    | self testing  |
| Microbiological residues                 |  |                                |               |
| Total plate count                        | Not more than 1000 cfu / g                                   | accord with                    | US -NF 2022   |
| Yeast and mold                           | Not more than 100 cfu / g                                    | accord with                    | US -NF 2022   |
| Salmonella                               | negative   | accord with                    | US -NF 2022   |
| Colibacillus                             | negative   | accord with                    | US -NF 2022   |
| Packaging and storage                    |  |                                |               |
| Pack                                     | Sealed in 25kg paper bucket                                  |                                |               |
| Storage means                            | Keep sealed in dry and dark environment at room temperature. |                                |               |

Reported by / Date : 2023/9/7 Received by / Date : 2023/9/7 Approved by/ Date : 2023/9/8