

## **CERTIFICATE OF ANALYSIS**

| Product:            | Trans-zeatin  |
|---------------------|---|
| Catalog Number:     | 1637-39-4   |
| Molecular Formula:  | C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> O  |
| Molecular Weight:   | 219.24  |
| Lot No.:            | 210138  |
| Expiry Date:        | 08/2022   |
| Storage:            | -10-0°C (short term), -20°C (long term), desiccated   |
| Description:        | Trans-Zeatin belongs to the plant hormone family known as 'cytokinins', which regulate cell division, development, and nutrient processing. Cytokininins, including trans-Zeatin are pivotal in governing overall plant size and can extend the plant photosynthesis by delaying leaf aging and death |
| Structural formula: | CH <sub>3</sub> HO NH N N   |

| TESTS                 | SPECIFICATIONS     | RESULTS  | UNITS | REMARKS         |
|-----------------------|--------------------|----------|-------|-----------------|
| Appearance:           | White crystalline  | complies |       | practically     |
|                       | powder             |          |       | odourless       |
| Identification(HNMR): | Conform to the     | complies |       |                 |
|                       | reference spectrum |          |       |                 |
| Residue on ignition:  | NMT:0.1            | 0.03     | %     |                 |
| Total impurities :    | NMT:2.0            | 0.82     | %     | HPLC, 268nm     |
| Loss on drying:       | NMT:0.5            | 0.28     | %     | 80°C, 2h vacuum |
| Melting point:        | 207-214            | 213      | °C    |                 |
| EA:                   | C: 53.68~55.88     | 54.77    | %     |                 |
|                       | H:5.86~6.10        | 5.99     |       |                 |
|                       | N: 31.30~32.58     | 32.10    |       |                 |
| Purity:               | NLT:98             | 99.18    | %     | HPLC,268nm      |

NMT: Not more than; NLT: Not less than; MT: More than; LT: Less than Conclusion: approved

Quality Inspector