



Bio Basic Inc.

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## CERTIFICATE OF ANALYSIS

|              |                                         |
|--------------|-----------------------------------------|
| Product      | L-Aspartic acid sodium salt monohydrate |
| Grade        | Ultra Pure                              |
| Product Code | AB1178                                  |
| Formula      | $C_4H_6NaNO_4 \cdot H_2O$               |
| MW           | 173.1                                   |
| CAS#         | 323194-76-9                             |
| Lot No       |                                         |

| Test Items                                | Specifications                       | Results |
|-------------------------------------------|--------------------------------------|---------|
| Appearance                                | White Crystals or Crystalline Powder |         |
| Specific rotation $[\alpha]_D^{20}$       | +19.0° ~ +21.0°                      |         |
| State of solution                         | ≥98.0%                               |         |
| Chloride (Cl)                             | ≤0.020%                              |         |
| Ammonium (NH <sub>4</sub> )               | ≤0.02%                               |         |
| Sulfate (SO <sub>4</sub> )                | ≤0.030%                              |         |
| Iron (Fe)                                 | ≤20ppm                               |         |
| Heavy metals (Pb)                         | ≤10ppm                               |         |
| Arsenic (As <sub>2</sub> O <sub>3</sub> ) | ≤1ppm                                |         |
| Other amino acids                         | Pass                                 |         |
| Loss on drying                            | ≤0.25%                               |         |
| Assay                                     | ≥98.5 ~ 101.0%                       |         |
| pH                                        | 6.0 ~ 7.5                            |         |

Storage: R.T.

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