

## Certificate of Analysis

Date of Testing: 2025-03-29 10:35:29

Date of Next Testing: 2029-03-28 10:35:29

Product Name: **L-Asparagine Monohydrate**

CAS Number: 5794-13-8

Specifications & Purity: Animal Free, for cell culture, ≥99%

Lot #: C2520707

SKU #: **A119452**

Version: **0**

Analysis #: **483210**

Storage Temperature: Protected from light

| Parameter                                                             | Limit Values             | Result                   |
|-----------------------------------------------------------------------|--------------------------|--------------------------|
| Iron(Fe)                                                              | 0-10 (ppm)               | 1.50 ppm                 |
| Ignition Residue(Ash)                                                 | 0-0.1 (%)                | 0.05 %                   |
| Chloride                                                              | 0-0.02 (%)               | 0.01 %                   |
| Sulfate(SO42-)                                                        | 0-0.02 (%)               | 0.00 %                   |
| Ammonia (NH4)                                                         | 0-0.1 (%)                | 0.01 %                   |
| Purity(HPLC)                                                          | 99-100 (%)               | 99.73800 %               |
| Endotoxin Assay                                                       | 0-1 (EU/mg)              | 0.09 EU/mg               |
| Heavy metal (as Pb)                                                   | 0-10 (ppm)               | 1.30 ppm                 |
| Specific Rotation [α] <sub>20</sub> /D(c=10 in 6M HCl in dried basis) | 33-36.5 (°)              | 33.31 °                  |
| Loss on drying                                                        | 11.5-12.5 (%)            | 12.43 %                  |
| Appearance (A119452)                                                  | white crystalline powder | white crystalline powder |
| Ninhydrin-Positive Substances                                         | Conforms                 | Conforms                 |
| Solubility in H2O , Colorless,Clear,1g/50ml                           | pass                     | Pass                     |
| Infrared spectrum                                                     | Conforms to Structure    | Conforms to Structure    |
| Cell Culture Test                                                     | pass                     | Pass                     |



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A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager