

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-02-17 16:20:21
Date of Next Testing: 2026-02-16 16:20:21
Product Name: **L(+)-Glutamic acid**
CAS Number: 56-86-0
Specifications & Purity: 99%
Lot #: B2216322
SKU #: **G103978**
Analysis: **074972**

| Parameter | Limit Values | Result |
|---|-----------------------|-----------------------|
| Loss on drying | 0-0.5 (%) | 0.05 % |
| Specific Rotation [α] _D ²⁰ /D(c=10 in 2N HCl) | 30.5-32.5 (°) | 31.80° |
| As ₂ O ₃ | 0-1 (ppm) | 0.30 ppm |
| Iron(Fe) | 0-30 (ppm) | 0.00 ppm |
| Purity(as dry basis) | 99-100 (%) | 99.80 % |
| Sulfate(SO ₄ ²⁻) | 0-300 (ppm) | 0.28 ppm |
| Sulfate Ash | 0-0.1 (%) | 0.01 % |
| Ammonia (NH ₄) | 0-200 (ppm) | 50.00 ppm |
| Chloride (Cl ⁻) | 0-200 (ppm) | 88.00 ppm |
| Heavy metal (as Pb) | 0-10 (ppm) | 2.00 ppm |
| Appearance (G103978) | white powder | White powder |
| Infrared spectrum | Conforms to Structure | Conforms to Structure |
| Other amino acids | Not detected | Not detected |



John Su
QA & QC Manager