

Certificate of Analysis

| | |
|--------------------------|--|
| Date of Testing: | 2023-04-24 15:35:57 |
| Date of Next Testing: | 2027-04-23 15:35:57 |
| Product Name: | L-Methionine |
| CAS Number: | 63-68-3 |
| Specifications & Purity: | from non-animal source, meets EP, JP, USP, for cell culture, 99.0-101.0% |
| Lot #: | D2320079 |
| SKU # | M101131 |
| Version | 0 |
| Analysis #: | 053187 |
| Storage Temperature: | Protected from light |

| Parameter | Limit Values | Result |
|---------------------------------------|------------------------|------------------------|
| Chloride | 0-0.02 (%) | 0.01 % |
| Assay | 99-101 (%) | 99.91 % |
| Sulfate(SO42-) | 0-0.02 (%) | 0.01 % |
| (As)Arsenic | 0-2 (ppm) | 0.00 ppm |
| Endotoxin Assay | 0-1 (EU/mg) | 0.00 EU/mg |
| Loss on drying | 0-0.2 (%) | 0.00 % |
| Heavy metal (as Pb) | 0-10 (ppm) | 3.00 ppm |
| Ammonia (NH4) | 0-0.02 (%) | 0.01 % |
| Appearance (M101131) | white powder | White powder |
| Cell Culture Test | pass | Pass |
| Cell Line test | Attached Cell Line | Attached Cell Line |
| Expected Solvent Residual Solvent | Meets Requirements | Meets Requirements |
| Identity by IR | Conforms to Structure | Conforms to Structure |
| Origin | non-animal source | non-animal source |
| Residual Solvents USP <467> | meets the requirements | meets the requirements |
| Solubility,Clear , 2.5g to 100 mL H2O | pass | Pass |



ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su
QA & QC Manager