



CERTIFICATE OF ANALYSIS

Product Name: L-Methionine
 USP Grade

Catalog Number: M018 **Molecular Formula: C₅H₁₁NO₂S**
Lot Number: 05182011 **Formula Weight: 149.21**
CAS Number: 63-68-3 **Storage: 15 to 30°C**
Source: Non-animal **Retest Date: 31-MAY-2023**

<u>Test</u>	<u>Specifications</u>	<u>Results</u>
Appearance	White Crystalline Powder	PASS
Identity Test	Passes Test	PASS
Assay	98.5 - 101.5%	99.56 %
Solubility (1%, H ₂ O)	Clear, Colorless Solution	PASS
pH (1%, H ₂ O)	5.6 - 6.1	5.90
Endotoxin (30mg/L)	Report	< 0.1 EU/mL
Optical Rotation	+22.4° to +24.7°	+23.52°
Chloride (Cl)	≤ 0.05%	< 0.05%
Sulfate (SO ₄)	≤ 0.03%	< 0.03%
Iron (Fe)	≤ 30 ppm	< 30 ppm
Heavy Metals (Pb)	≤ 15 ppm	< 15 ppm
Organic Volatile Impurities	Passes Test	PASS
Individual Impurity	Record	< 0.5 %
Total Impurities	Record	< 2.0 %
Loss on Drying	≤ 0.3%	0.27%
Residue on Ignition	≤ 0.4%	0.30%

This product meets or exceeds the quality standards established by Caisson Laboratories, Inc.

This product is intended for Laboratory Use Only

Prepared by:

Reviewed by:

Aaron Dryden 07/27/2018
 Quality Control