

## Certificate of Analysis

Date of Testing: 2024-10-29 12:13:46  
Date of Next Testing: 2028-10-28 12:13:46  
Product Name: **DL-Methionine**  
CAS Number: 59-51-8  
Specifications & Purity:  $\geq 99\%$   
Lot #: J2425568  
SKU #: **M104886**  
Version: **1**  
Analysis #: **419071**  
Storage Temperature: Store at 2-8°C, Protected from light

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	9.1-9.7 (%)	9.43%
Carbon by Elemental Analysis	39.8-40.6 (%)	40.22%
Purity(Nonaqueous Titration)	98.5-101.5 (%)	101.23%
Specific Rotation $[\alpha]_{20}^D(c=2 \text{ in } 2N \text{ HCl})$	-2~2 (°)	0.34600°
Appearance (M104886)	White Powder, Crystals, Flakes, or chips	White Powder, Crystals, Flakes, or chips
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O, Colorless, Clear, 50 mg/ml H <sub>2</sub> O	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager