

## Certificate of Analysis

Date of Testing: 2024-03-07 13:53:47

Date of Next Testing: 2028-03-06 13:53:47

Product Name: **L-Cystine**

CAS Number: 56-89-3

Specifications & Purity: 99%

Lot #: C2405294

SKU #: **C108225**

**Analysis:** **322347**

Storage Temperature: Protected from light, Desiccated

Parameter	Limit Values	Result
Specific Rotation [α] <sub>D</sub> (c=1 in 1mol/L HCl)	-230--215 (°)	-221.00 °
Sulfate Ash	0-0.1 (%)	0.03 %
Heavy metal (as Pb)	0-10 (ppm)	1.36 ppm
Loss on drying(105°C, 3h)	0-0.5 (%)	0.10 %
Carbon by Elemental Analysis	29.4-30.6 (%)	29.41 %
Nitrogen by Elemental Analysis	11.4-11.9 (%)	11.45 %
Purity(HPLC)	99-100 (%)	99.80000 %
Infrared spectrum	Conforms to Structure	Conforms to Structure
Appearance (C108225)	White to Off-White Powder	White to Off-White Powder
Solubility in 1 M HCl , Colorless to Light Yellow, Clear, 50 mg/ml pass		Pass



John Su  
QA & QC Manager