

SUNNY CHEMGROUP CO., LIMITED

218 C 5/F JAFFE MANSION 218 JAFFE RD WAN CHAI HONGKONG

(TAX ID: 6248141400012176)

Certificate of analysis

INVOICE NO.:TTSFC564/23

PO No.:6697

SAMPLE NAME	L-Cysteine monohydrate HCL	BATCH NO.	23091901
QUANTITY	1000 KGS	DATE OF MANUFACTURE	Sep, 19, 2023
SPECIFICATION	USP-NF2021	RE-TEST DATE:	Sep. 18, 2025

ITEM	Standards	RESULT
Appearance	White crystalline Or Crystalline powder	Conforms
PH	1.5-2.0	1.7
Transmittance state of solution	≥98.0%	99.1
Chlorides	19.8%-20.8%	20.10%
Ammonium	≤0.020%	<0.020%
Sulfates	≤0.030%	<0.030%
Iron	≤10ppm	<10ppm
Heavy metals	≤10ppm	<10ppm
Arsenic	≤1ppm	<1ppm
Related compounds	Not more than 0.5% of any individual impurity is found;not more than 2.0% of total impurities is found	Conforms
Specific Rotation	+ 5.7° ~ +6.8°	6.2°
Residue on ignition	≤0.10%	0.05%
Loss on drying	8~12%	11.2%
Assay(dried basis)	98.5~101.0%	99.5%

Conclusion: This product conforms to USP-NF2021 standard.

For and on behalf of
SUNNY CHEMGROUP CO., LIMITED
 陽光化工集團有限公司


 Authorized Signature(s)

APROBADO
 AC-001-100
 LOTE: 305983

ref: PT-25226-777

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