

CERTIFICATE OF ANALYSIS

Standard product specification — applicable to all consignments of this product and grade supplied by Scapex Exports Pvt. Ltd.

Product Name	L-Cysteine hydrochloride monohydrate	C.A.S. Number	7048-04-6
Product Category	Vitamins, Minerals & Amino Acids	Product Group	Sulfur Amino Acids
Grade / Standard	99% Pharma/Nutra Grade	Physical Form	White crystalline powder
Country of Origin	India	Document No.	SCX/COA/98689A
Packing	Standard export packing — bags, drums, carboys, IBC or ISO tank as applicable	Storage	Cool, dry, well-ventilated place in tightly closed original packing

ANALYTICAL RESULTS

S. No.	Test Parameter	Specification	Result	Method
1	Description	White crystalline powder	Complies	Visual
2	Identification	Conforms to the structure of the substance	Complies	FTIR / Chemical test
3	Solubility	As per specification	Complies	Visual / Monograph
4	Assay	Not less than 99.0 % w/w	99.47	Titrimetry / Instrumental
5	Specific Optical Rotation	As per monograph	Conforms	Polarimetry
6	Loss on Drying	Not more than 0.5 % w/w	0.10	Gravimetry
7	Residue on Ignition	Not more than 0.1 % w/w	0.050	Gravimetry
8	Chloride	Not more than 0.05 %	0.0027	Turbidimetry
9	Lead (Pb)	Not more than 3 ppm	Less than 0.5 ppm	ICP-MS
10	Heavy Metals (as Pb)	Not more than 10 ppm	Less than 5 ppm	ICP-OES
11	Total Aerobic Microbial Count	Not more than 1000 cfu/g	37 cfu/g	IP / USP <61>
12	Total Yeast & Mould Count	Not more than 100 cfu/g	14 cfu/g	IP / USP <61>
13	Escherichia coli	Absent in 1 g	Absent	IP / USP <62>
14	Salmonella species	Absent in 10 g	Absent	IP / USP <62>

Remarks

Material supplied against this specification is analysed on every production lot and **conforms** to the limits stated above in all tested parameters. Results shown are the typical values obtained for this grade.

Retained samples are held against every export consignment. Store in tightly closed original packing, in a cool, dry, well-ventilated place away from incompatible materials and direct sunlight.

Checked and Approved by

Prem Panchal
Quality Assurance
Scapex Exports Pvt. Ltd.

This document sets out the standard specification for the product named above and applies to all consignments of this grade. It is not a lot-specific release document; a lot-specific certificate carrying the analysis of the material actually shipped is issued with each consignment. The information is given in good faith; it does not constitute a warranty of fitness for any particular purpose. Refer to the Safety Data Sheet before handling.