



CERTIFICATE OF ANALYSIS

Product Name: **L-Cysteine Hydrochloride Monohydrate**
USP Grade

Catalog Number: C010 Molecular Formula: $C_3H_7NO_2S \cdot HCl \cdot H_2O$
Lot Number: 05162003 Formula Weight: 175.63
CAS Number: 7048-04-6 Storage: 15 to 30°C
Retest Date: 31-MAY-2021

<u>Test</u>	<u>Specifications</u>	<u>Results</u>
Appearance	White Crystalline Powder	PASS
Identity Test	Passes Test	PASS
Assay (Anhydrous Basis)	98.5 - 101.0 %	99.59 %
Loss on Drying	8.0 - 12.0 %	11.39 %
Residue on Ignition	≤ 0.4 %	0.08 %
Optical Rotation	+5.7 to +6.8°	+5.93°
Chloride	Report	20.03 %
Solubility (10%, H ₂ O)	Clear, Colorless Solution	PASS
pH (1%, H ₂ O)	1.5 - 2.0	1.78
Sulfate (SO ₄)	≤ 0.03 %	< 0.02 %
Iron (Fe)	≤ 0.003 %	< 0.001 %
Heavy Metals (as Pb)	≤ 0.0015 %	< 0.001 %
Organic Volatile Impurities	Passes Test	PASS
Endotoxin (60 mg/L, H ₂ O)	≤ 0.125 EU/mL	< 0.1 EU/mL

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 04/13/2018
Quality Control