



NEWAY SINOPHC TECH. LIMITED

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Certificate of Analysis (COA)

Issue Date: February 28, 2026 **Quality Release Date:** February 28, 2026

Product Information

Product Name	L-Lysine Monohydrochloride (Food Grade)
Product Number	LLM-20260228
Batch Number	LLM-SH2026022801
Brand	SIGALD
CAS Number	657-27-2
EINECS Number	211-518-3
Formula	C ₆ H ₁₄ N ₂ O ₂ ·HCl
Formula Weight	182.65 g/mol

Test Results

Test	Specification (Food Industry Standard)	Result	Unit	Test Method
Appearance (Color)	White to off-white	White	-	Visual Inspection
Appearance (Form)	Crystalline powder, free-flowing	Free-flowing crystalline powder	-	Visual Inspection
Assay (L-Lysine Monohydrochloride)	≥ 99.0%	99.7%	%	High Performance Liquid Chromatography (HPLC)
Loss on Drying (105°C, 2h)	≤ 0.5%	0.19%	%	Gravimetry
Ash Content	≤ 0.1%	0.03%	%	550°C Ignition Gravimetry
pH Value (1% aqueous solution, 25°C)	5.0-6.0	5.5	-	Digital pH Meter
Specific Rotation [α] ₂₀ ^D	+20.4° ~ +21.4°	+20.9°	°	Polarimetry
Chloride (as Cl ⁻)	18.0-19.0%	18.5%	%	Volumetric Titration
Sulfate (as SO ₄ ²⁻)	≤ 0.02%	0.005%	%	Turbidimetry
Heavy Metals (Pb)	≤ 1 ppm	0.2 ppm	ppm	Atomic Absorption Spectrometry (AAS)
Arsenic (As)	≤ 0.5 ppm	< 0.1 ppm	ppm	Atomic Fluorescence Spectrometry (AFS)
Cadmium (Cd)	≤ 0.1 ppm	< 0.05 ppm	ppm	Atomic Absorption Spectrometry (AAS)
Mercury (Hg)	≤ 0.01 ppm	< 0.005 ppm	ppm	Cold Vapor Atomic Absorption Spectrometry
Total Bacterial Count	≤ 100 CFU/g	22 CFU/g	CFU/g	Plate Count Method
Yeast & Mold	≤ 10 CFU/g	< 5 CFU/g	CFU/g	Plate Count Method
E. coli	Negative	Negative	-	Microbiological Detection
Salmonella	Negative	Negative	-	ISO 6579-1
Solubility	Freely soluble in water, slightly soluble in ethanol	Conforms	-	Visual & Gravimetric Method

Certification

This batch of L-Lysine Monohydrochloride (Food Grade) has been tested in accordance with the national and international food additive industrial standards and meets all specified quality requirements. It is qualified for use as a food additive.