

# Certificate of Analysis

Product Name:

**L-Arginine**

Product Number:

**A4474**

Batch Number:

**CDBG6785**

Brand:

SIGMA

CAS Number:

74-79-3

Formula:

C<sub>6</sub>H<sub>14</sub>N<sub>4</sub>O<sub>2</sub>

Formula Weight:

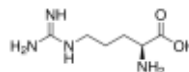
174.20 g/mol

Quality Release Date:

21 APR 2025

Expiration Date:

JUN 2027



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Crystalline Powder	Crystalline Powder
Appearance of Solution	Pass	Pass
Solubility (Turbidity)	Clear	Clear
1.0 g to 10 mL of water		
Solubility (Color)	Colorless	Colorless
1.0 g to 10 mL of water		
Solubility (Form)	Solution	Solution
1.0 g to 10 mL of water		
Identification (USP)	Pass	Pass
Identification A (EP)	Pass	Pass
Identification C (EP)	Pass	Pass
Iron (Fe)	≤ 10 ppm	< 10 ppm
Loss on Drying (USP)	≤ 0.50 %	0.10 %
Ammonium	≤ 0.02 %	< 0.02 %
Assay (EP) (dried basis)	98.5 - 101.0 %	100.5 %
Chloride (EP)	≤ 0.020 %	< 0.020 %
Cytotoxicity	Pass	Pass
Residue on Ignition	≤ 0.10 %	0.01 %
Ninhydrin-Positive Substances	Conforms	Conforms
Specific Rotation	26.9 - 27.9 deg	27.5 deg
c = 8, 6N HCl, dried basis, 20 °C		
Organic Impurities	Pass	Pass

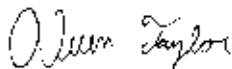
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**Batch Number:** CDBG6785

Test	Specification	Result
pH 1.0g in 20 mL water	10.5 - 12.0	11.2
Endotoxin	$\leq 1$ EU/mg	< 1 EU/mg
Residual Solvents	Meets Requirements	Meets Requirements
Arsenic (As)	$\leq 1.0$ ppm	< 1.0 ppm
Specific Rotation (USP) c = 8, 6 N HCl, dried basis, 25°C	26.3 - 27.7 deg	27.2 deg
Sulfate (SO <sub>4</sub> )	$\leq 0.020$ %	< 0.020 %



Alvin Taylor, QA Operations  
Quality Assurance  
Cleveland, OH US

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