

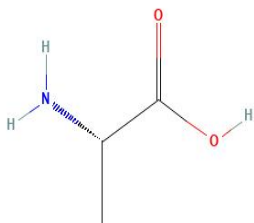


Technical Data Sheet

Tianjin Jincheng Biotechnology Co., Ltd.

Product Name: L-Alanine

Chemical Structure:



Molecular Formula: C₃H₇NO₂

Molecular Weight: 89.09

CAS No.: 56-41-7

Specifications

Item	Limit	Analysis method
Appearance	White crystals or crystalline powder	Visual
Assay (on dried basis)	98.5% - 101.5%	Titration (perchloric acid)
Identification	Meets the USP requirement	USP <197K>
pH	5.5 - 7.0	pH meter
Specific rotation [α] _{20D}	+13.7° to +15.1°	USP <781>
OVI / Chromatographic purity	Meets the USP requirement	GC / HPLC
Loss on drying	Not more than 0.20%	USP <731>
Residue on ignition	Not more than 0.15%	USP <281>
Chloride	Not more than 0.05%	USP <221>
Sulfate	Not more than 0.03%	USP <221>
Heavy metals (as Pb)	Not more than 15 ppm	USP <231>
Iron	Not more than 30 ppm	USP <241>
Lead / Cadmium	NMT 1 / 0.5 mg/kg	ICP-MS
Arsenic / Mercury	NMT 1 / 0.1 mg/kg	ICP-MS
Maleic / malic / fumaric acids	NMT 0.05% each (incl. unspecified)	HPLC
Total impurities	Not more than 0.2%	HPLC
Total plate count	Not more than 1,000 cfu/g	USP <61>
Mould and yeast	Not more than 100 cfu/g	USP <61>
E. coli	Negative	USP <62>
Coliforms	Less than 0.3 MPN/g	USP <62>
Salmonella	Negative in 25 g	USP <62>
Staphylococcus aureus	Negative in 25 g	USP <62>

Recommended shelf life: 2 years

External packing: Fibre drum, 25 kg net

Inner packing: Double-layer PE bag

Storage: Preserve in tight containers, protected from light, in a cool and dry place.

Note: Analytical methods refer to current USP general chapters and the manufacturer's standard (USP43-NF38); this document is for reference only and the quality of each batch is subject to the COA supplied with the goods.

Preparation Date: Sep. 21, 2026 | Version: 1.0 | Prepared by: | Product code: JC-ALA-001