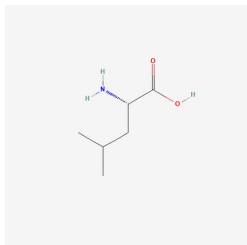




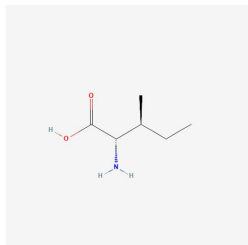
Technical Data Sheet

Tianjin Jincheng Biotechnology Co., Ltd.

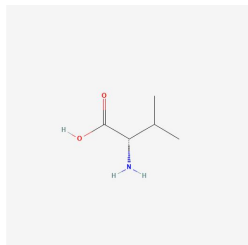
Product Name: Branched-Chain Amino Acids (BCAA) 2:1:1, Instant
Chemical Structure:



L-Leucine



L-Isoleucine



L-Valine

Molecular Formula: L-Leucine C₆H₁₃NO₂; L-Isoleucine C₆H₁₃NO₂; L-Valine C₅H₁₁NO₂

Molecular Weight: L-Leucine 131.17; L-Isoleucine 131.17; L-Valine 117.15

CAS No.: L-Leucine 61-90-5; L-Isoleucine 73-32-5; L-Valine 72-18-4

Specifications

Item	Limit	Analysis method
Description	White to off-white powder	Visual
Assay	Not less than 95.0%	HPLC
L-Leucine content	45.0% - 55.0%	HPLC
L-Isoleucine content	22.5% - 27.5%	HPLC
L-Valine content	22.5% - 27.5%	HPLC
Sunflower lecithin	0.5% - 1.0%	HPLC
Bulk density	Not less than 0.25 g/mL	USP <616>
Tapped density	Not less than 0.45 g/mL	USP <616>
Heavy metals (as Pb)	Not more than 10 ppm	ICP-MS
Lead (Pb)	Not more than 3 ppm	ICP-MS
Cadmium (Cd)	Not more than 1 ppm	ICP-MS
Arsenic (As)	Not more than 1 ppm	ICP-MS
Mercury (Hg)	Not more than 0.1 ppm	ICP-MS
Loss on drying	Not more than 1.0%	Gravimetric method
Residue on ignition	Not more than 1.0%	Gravimetric method
Total plate count	Not more than 1,000 cfu/g	USP <61>
Yeasts and molds	Not more than 100 cfu/g	USP <61>
Escherichia coli	Negative	USP <62>
Salmonella	Negative	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 in-house standard; this document is for reference only and the quality of each batch is subject to the COA supplied with the goods.

Preparation Date: Sep. 20, 2026 | Version: 1.0 | Prepared by: | Product code: JC-BCAA-001