



HAOSAIL
HAOSAIL SCIENCE CO., LTD
浩赛生物科技

青岛浩赛生物科技有限公司

HAOSAIL SCIENCE CO., LTD.

Room 1008, Zhonghai International Plaza, No. 112, Jiushui Road, Licang District, Qingdao 266041, China
Tel: +86-532-80922346 Cell: +86-13615426430

CERTIFICATE OF ANALYSIS

PRODUCT NAME: INSTANT BCAA
BATCH NO: 211SBCM230619019
QUALITY: IN-HOUSE STANDARD
QUANTITY: 3000KGS

PRODUCTION DATE: 19.JUN.2023
REPORT DATE: 26.JUN.2023
RETEST DATE: 18.JUN.2026
PATENT NO:201310693215.1

Description: Instant BCAA powder is an instant blend of three branched chain Amino acids in a ratio of 2:1:1. Sunflower Lecithin is added as surfactant. It can be dissolved in water very fast, suitable for sport drink, solid instant formula.

Tests	Limits	Test results	Test method
Appearance	White to off-white fine powder	white fine powder	Visual Method
Assay (Titration)	≥95.0%	96.8%	Titration
Leucine Content(HPLC)	45.0~55.0%	46.1%	HPLC
Isoleucine Content(HPLC)	22.5~27.5%	23.3%	HPLC
Valine Content(HPLC)	22.5~27.5%	23.5%	HPLC
Sunflower Lecithin	0.5%~1.0%	0.8%	according to the quantity we added.
Bulk Density	≥0.32g/ml	0.41g/ml	Measuring cylinder
Tapped Density	≥0.45g/ml	0.61g/ml	Measuring cylinder
Heavy metals(Pb)	≤10ppm	<10ppm	USP<231>
Lead	≤3ppm	< 3ppm	USP<251>
Cadmium	≤1ppm	< 1ppm	USP<261>
Arsenic(As)	≤1ppm	< 1ppm	USP<211>
Mercury	≤0.1ppm	< 0.1ppm	USP<261>
Loss on drying	≤0.8%	0.28%	USP<731>
Residue on ignition	≤1.0%	0.14%	USP<281>
Total plate count	≤1000cfu/g	<1000cfu/g	USP<61>
Yeast and Molds	≤100cfu/g	<100cfu/g	USP<61>
E.Coli	Negative	Negative	USP<62>
Salmonella	Negative/25g	Negative/25g	USP<62>
Particle Size Range	≥90% through 80 Mesh	98%through 80 Mesh	Sieving

Packaging: 25KG/Carton, packed with double layer polyethylene bag as inner.

Storage and Handling: Store in a cool, dry area and not in direct sunlight. The preferred storage temperature should not exceed 0°C~40°C.

Shelf Life: It is recommended to use the entire contents after opening. The product will be stable for at least three years after manufacture in the original unopened package.

Conclusion: Passed test according to the in-house standard.

Inspector: Mengke Li

Checker: Lingling Yu

For and on behalf of
HAOSAIL SCIENCE CO., LTD
Director: Lingling Chen
Authorized Signature(s)