

CERTIFICATE OF ANALYSIS

Product Name: Beta-Alanine	Quantity: 5000kg	Batch No: HC652403006
Producing date: 2024.03.30	Sampling date: 2024.03.30	Shelf life : Three years
Reference standard: AJI97		
Item	Specifications	Results
Appearance	White crystals or crystalline powder	Conforms
Transmittance, %	≥95	99.0
Assay,%	98.0-101.0	99.6
Chloride(Cl), %	≤0.04	<0.04
Sulfate(SO ₄), %	≤0.048	<0.048
Ammonium (NH ₄), %	≤0.02	<0.02
Loss on drying,%	≤0.30	0.11
Residue on ignition,%	≤0.20	0.03
Heavy metals(Pb)	≤10ppm	Conforms
Iron	≤30ppm	Conforms
Lead	≤3ppm	Conforms
Arsenic	≤1ppm	Conforms
Mercury	≤0.1ppm	Conforms
Cadmium	≤1ppm	Conforms
PH	6.5-7.5	6.98
Total plate count	≤1000cfu/g	Conforms
Yeasts & moulds	≤100cfu/g	Conforms
E. Coli	Negative/25g	Conforms
Salmonella	Negative/25g	Conforms
Other amino acids	Chromatogrphically not detectable	Conforms
Conclusion: This product conforms to requirements of AJI97 standard.		

The above information is as provided by the manufacturer or our supplier.

THE FOLLOWING INFORMATION IS AS PROVIDED BY OUR SUPPLIER

CERTIFICATE OF ANALYSIS

PRODUCT NAME: L-Phenylalanine
BATCH NO: 20250620
PACKING: 25kg/drum

MFG DATE: 2025.06.20
EXP DATE: 2028.06.19
QUANTITY: 250kg

Item	Specification USP36	Result
Appearance	White to off-white powder	Conforms
Assay	98.5% ~ 101.5%	99.5%
Specific rotation	-33.2° ~ -35.5°	-34.2°
PH	5.4 ~ 6.0	5.74
Loss on drying	≤0.3%	0.16%
Residue on ignition	≤0.4%	0.04%
Chloride	≤0.05%	<0.05%
Sulfate	≤0.03%	<0.03%
Iron	≤30ppm	<30ppm
Heavy metals	≤15ppm	<15ppm
Yeast & moulds	≤100cfu/g	<100cfu/g
<u>Arsenic (As)</u>	≤1.0ppm	<1.0ppm
Lead	≤3.0ppm	<3.0ppm
<u>Mercury</u>	≤0.1ppm	<0.1ppm
<u>Cadmium</u>	≤1.0ppm	<1.0ppm
<u>Aerobic Plate Count</u>	≤1000CFU/g	<1000CFU/g
<u>Yeast&moulds</u>	≤100CFU/g	<100CFU/g
E.coli	Negative/g	Negative
Conclusion :	The product conforms USP36	

This product Non-irradiated and non-GMO from source and suitable for human consumption

CERTIFICATE OF ANALYSIS

PRODUCT NAME: L-Methionine
BATCH NO: 20250922
PACKING: 25kg/drum

MFG DATE: 2025.09.22
EXP DATE: 2028.09.21
QUANTITY: 250kg

Test Items	Specification	Test Results
Appearance	White crystalline powder or small flakes	Conforms
Identification	Infrared Absorption	Conforms
Solubility	Soluble in water,in warm dilute alcohol and in dilute mineral acids;insoluble in ether,in absolute alcohol;in benzene,and in acetone.	Conforms
Assay	98.5% ~ 101.5%	99.5%
PH	5.6~6.1	5.87
Loss on drying	≤0.30%	0.10%
Residue on ignition	≤0.40%	0.05%
Chloride	≤0.05%	<0.05%
Sulfate	≤0.03%	<0.03%
Iron	≤30ppm	<30ppm
Arsenic (As)	≤1.0ppm	Conforms
Lead (Pb)	≤3.0ppm	Conforms
Mercury (Hg)	≤ 0.1ppm	Conforms
Cadmium (Cd)	≤1.0ppm	Conforms
Heavy metals	≤15ppm	<15ppm
Total Plate Count	≤1000CFU/g	Conforms
Yeast and Moulds	≤100 CFU/g	Conforms
Conclusion: Passed test according to the Standard of USP35.		
This product Non-irradiated and non-GMO from source and suitable for human consumption.		

The above information is as provided by the manufacturer or our supplier

Certificate of Analysis



Delivery Address

Protein Partners Limited
Unit 11
Hyde Point Industrial Estate
Dunkirk Lane
Hyde
SK14 4NL

Order No: 237669
Despatch Date: 30/07/26

Customer Order No: 24705
Account No: 100470

Order Date: 17/06/26

Product Description	Tutti Frutti Flavouring
Product Code	69428-0250
Batch No.	120128
Best Before End	NOV 2027

Test	Specification	Result	Status
Appearance	Off white	Conforms	Pass
Physical Form	Fine, free-flowing powder	Conforms	Pass
Organoleptic	Typical Tutti Frutti, conforms to standard	Conforms	Pass

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Claremont Ingredients Limited, Unit 2B, Aspect Court, Silverdale Enterprise Park, Newcastle-under-Lyme, ST5 6SS
Tel: 01782 841000 Registered in England No. 2817306 VAT Registration No. 507 2924 94
EORI – GB507292494002



Manufactured by: NINGXIA HENGKANG TECHNOLOGY CO.,LTD

Address: East Road of Hongsheng , Biotech Park of Yinchuan , Ningxia, CHINA

Tel: 0086-951-8533386 Post Code: 750205

Website: <http://www.hengkangchina.com>

CERTIFICATE OF ANALYSIS

HKSOR-ZB-B040

产品检验报告单

Product Name	Creatine Monohydrate(200 mesh) N-amidinosarcosine hydrate-CAS Number 6020-87-7		Lot No.	260415-C11			
Quantity	24000 Kgs	Packing	25 Kg/Carton		Test No.	0111	
Production Date	2026/04/15		Report Date	2026/04/17		Expiry Date	2028/04/14
Item		Specification			Results		
Appearance /外观		White crystalline powder			White crystalline powder		
Assay (dry basis) /含量（干基）		99.5~102.0%			100.0%		
Clarity And Colour Of Solution /澄清度		Clear and Colourless			Conform		
Odor /气味		Odorless			Conform		
Taste /味道		Tasteless			Conform		
Creatinine /肌酸酐		≤50ppm			28 ppm		
Dicyandiamide /双氰胺		≤50ppm			21 ppm		
Dihydrotriazine /双氢三嗪		≤0.0005%			<0.0005%		
Any Unspecified Impurity /其他未知杂质		≤0.1%			<0.1%		
Cyanide /氰化物		≤1ppm			<1ppm		
Loss on Drying /干燥失重		10.5%~12.0%			11.8%		
Test of Suifuric Acid /硫酸测试		No Carbonation			Conform		
Residue on Ignition /炽灼残渣		≤0.1%			0.02%		
Arsenic /砷盐		≤0.0001%			<0.0001%		
Sulfate /硫酸盐		≤0.03%			<0.03%		
Iron /铁盐		≤10ppm			<10 ppm		
Heavy Metals /重金属		≤10ppm			<10 ppm		
Lead（Pb）/铅		≤1ppm			Conform		
Mercury（Hg）/汞		≤0.1ppm			Conform		
Cadmium（Cd）/镉		≤1ppm			Conform		
Bulk Density /自然密度		≥430g/L			460 g/L		
Tapped Density /敲击密度		≥550g/L			691 g/L		
Total Bacterial Count /细菌总数		≤100cfu/g			<100 cfu/g		
Mold & Yeast /霉菌& 酵母菌		≤100cfu/g			<100 cfu/g		
E.Coli /大肠埃希氏菌		Negative/g			Negative/g		
Salmonella /沙门氏菌		Negative/10g			Negative/10g		
Staphylococcus Aureus /金黄葡萄球菌		Negative/g			Negative/g		
Conclusion: The product meets the standard of HKQB-CM-K-01-R04							

Compiled by: 张建 2026.04.17

Checked by: 孙同 2026.04.17

Approved by: 王咏梅 2026.04.17



巴彦淖尔华恒生物科技有限公司
BAYANNUR HUAHENG BIOTECHNOLOGY CO.,LTD

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Tel: 0551-64219588 Fax:0551-65684132 网址: Http://www.huahengbio.com

分 析 报 告
CERTIFICATE OF ANALYSIS

产品名称: L-缬氨酸 Product Name: L-Valine	数 量: 5500kgs Quantity:	批号: N241220L22 Batch No:
生产日期: 2024-12-20 Production date:	取样日期: 2024-12-21 Sampling date:	报告日期: 2024-12-25 Report date:
参照标准: USP24 Reference standard: USP24	包装: 25kg/箱 Package: 25kg/box	有效期: 2026-12-19 Expiry date:
项 目 Item	标 准 Standard	检 测 结 果 Test Results
外观(Appearance)	白色结晶或结晶性粉末 white crystalline or crystalline	白色结晶 white crystalline
鉴别(红外) Identification (infraed absorption)	与标准图谱一致 Consistent with standard atlas	符合要求 Conform
有机挥发杂质 (organic volatile impurities)	Per USP	符合要求(Conform)
粒度 (Mesh Size)	80%通过 80 目 (≥80%) Pass 80 mesh	符合要求 Conform
含量 (Assay) %	98.5~101.5	99.4
比旋光度(Specific optical rotation)[α] _D ²⁰ , °	+26.6°~+28.8°	+27.52
PH	5.5~7.0	5.67
干燥减量(Loss on drying)% ≤	0.3	0.07
灼烧残渣(Residue on ignition)% ≤	0.1	0.03
硫酸盐 Sulfate(SO ₄)% ≤	0.03	<0.03
氯化物 Chloride(Cl)% ≤	0.05	<0.05
铁 (Fe), % ≤	0.003	<0.003
重金属 (以 Pb 计) Heavy metals (Pb), ppm ≤	15	<15
砷盐 (As), ppm ≤	1	<1
铅 Lead, ppm ≤	3	<3
镉 (Cd), ppm ≤	1.0	<1.0
汞 (Hg), ppm ≤	0.1	<0.1
菌落总数 (Total plate count), cfu/g ≤	1000	20
霉菌和酵母菌总数(Yeast & mold), cfu/g ≤	100	<10
大肠菌群 (Coliforms), MPN/g ≤	3	<3
沙门氏菌/25g Salmonella/25g	不得检出 Not detectable	未检出 Not detected
结论: 本产品符合 USP24 标准 Conclusion: The product conforms to standard of USP24		

分析者: 王舒芳

Analyst:

审核者: 刘美秀

Verifier:



XINJIANG FUFENG BIOTECHNOLOGIES CO., LTD.

新疆阜丰生物科技有限公司

CERTIFICATE OF ANALYSIS

检验报告单

Product Name: L-Leucine Fermentation

CAS No. 61-90-5

Packing: 25kg/drum

Batch No.: L2511028

Quantity: 4500kg

Mfg Date: 28/11/2025

Inspection Date:29/11/2025

Expiry Date:27/11/2027

Country Of Origin: China

PO /IMP No: 8091193/127089

Items	Limits	Test results
Description	White crystals or crystalline powder	Conforms
Assay	98.5%~101.5%	100.0%
Identification (Infrared Absorption)	Corresponding to Reference Spectrum	Conforms
Mesh Size	/	80mesh
PH	5.5~7.0	6.11
Specific rotation	+14.9 ° ~+17.3 °	+15.6 °
Residue on Ignition	≤0.1%	0.09%
Loss on Drying	≤0.2%	0.13%
Bulk Density	0.2-0.6g/ml	Conforms
Chloride (Cl)	≤500ppm	< 500 ppm
Iron(Fe)	≤30ppm	<30ppm
Sulfate (SO ₄)	≤300ppm	< 300 ppm
Heavy Metals	≤10ppm	<10ppm
Lead (Pb)	≤3ppm	<3ppm
Arsenic (As)	≤1ppm	<1ppm
Cadmium (Cd)	≤1ppm	<1ppm
Mercury (Hg)	≤0.1ppm	<0.1ppm
Total Plate Count	≤1000cfu/g	<1000cfu/g
Yeast and Molds	≤100cfu/g	<100cfu/g
E.Coli	Negative in 10g	Confirms
Staphylococcus Aureus	Negative in 10g	Confirms
Salmonella	Negative in 25g	Confirms
Organic volatile impurities	Meets the requirements	Confirms
COMPLY WITH THE STANDARD OF USP24		

新疆阜丰生物科技有限公司
XINJIANG FUFENG BIOTECHNOLOGIES CO., LTD.
(4)

Shine Star (Hubei) Biological Engineering Co., Ltd.

Headquarters: No. 666 Chanling Avenue, Douhudi Town, Gong An, Jingzhou, Hubei, P. R. China
Tel: +86-27 8578 6222 E-mail: sales@Shine-Star.com.cn
Fax: +86-27 8578 6555 Website: www.Shine-Star.com.cn

CERTIFICATE OF ANALYSIS

Product Name	Creatine Hydrochloride (with 0.3% Anti-Caking)		
CAS No.	17050-09-8	PO/IMP No.	8088271/121271
Quantity	2700kgs	Manufacture Date	Sep 21, 2025
Batch No.	102253061	Report Date	Oct 04, 2025
Quality Standard	Specified Standard	Expiry Date	Sep 20, 2027
Test Item		Standard	Result
Appearance 外观		White powder	Conforms
Assay 含量		≥99.0%	100.9%
Residue on Ignition灼烧残渣		≤0.5%	0.4%
Water 水分		≤0.5%	0.3%
Bulk Density 松密度		600g/L-850g/L	750g/L
Creatine 肌酸含量		74.3%-82.1%	79.4%
HCL 盐酸含量		20.7%-22.9%	21.5%
Creatinine 肌酸酐		≤1.0%	0.4%
Unspecified impurities 未知杂质		≤0.1%	<0.1%
Toal impurities 总杂质		≤2.0%	<2.0%
Heavy Metals 重金属		≤5ppm	<5ppm
Lead 铅		≤0.2ppm	<0.2ppm
Arsenic 砷		≤0.1ppm	<0.1ppm
Cadmium 镉		≤0.1ppm	<0.1ppm
Mercury 汞		≤0.01ppm	<0.01ppm
Particle size 颗粒大小		100% through 20mesh, 5% through	Conforms
Total Bacterial Count 细菌总数		≤1000cfu/g	<1000cfu/g
Yeast & Mould 酵母&霉菌		≤100cfu/g	<100cfu/g
E.Coli 大肠埃希菌		Negative/10g	Conforms
Salmonella 沙门氏菌		Negative/10g	Conforms
Staphylococcus Aureus 金黄色葡萄球菌		Negative/10g	Conforms
Conclusion: The products conform to the Specific Standard.			
Reported by: 赵敏		Verified by: 郭刚	
Storage: Preserve in tight, light-resistant containers.			





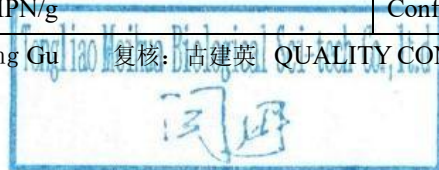
通辽梅花生物科技有限公司
Tongliao Meihua Biological Sci-Tech Co., Ltd.
内蒙古通辽市木里图镇
Mulitu Town, Keerqin Dis., Tongliao City, The Inner Mongolia
Tel: +86-0475-8877002 Fax: +86-0475-8877002
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通辽梅花生物科技有限公司检验报告单
TONGLIAO MEIHUA BIOLOGICAL SCI-TECH CO., LTD
CERTIFICATE OF ANALYSIS

品名 Product Name L-异亮氨酸 L-Isoleucine PO# 8094745/133705
批号 Batch NO. 120260201001 数量 Quantity 1T
Production Date 2026.02.01 Expiry Date 2028.01.31

项目 Item	标准 Standard	结果 Results
性状 Appearance	结晶粉末 Crystalline powder	结晶粉末 Crystalline powder
颜色 Color	白色 Whitish	白色 Whitish
鉴定 Identification	Infrared absorption	Conform
含量 Assay	≥98.5-101.5%	100.3
比旋度 Specific rotation[α] _{D25} ℃	+38.90 – +41.80	+39.7
干燥失重 Loss on Drying	≤0.3%	0.05
炽灼残渣 Ignited residue	≤0.3%	0.06
硫酸盐 Sulfate	≤0.03%	<0.03%
氯化物 Chloride(Cl)	≤0.05%	<0.05%
PH	5.5-7.0	6.46
重金属Heavy metals	≤10ppm	Conform
砷 Arsenic	≤1ppm	Conform
铁 Iron	≤0.003%	Conform
铅 (Lead)	≤3ppm	Conform
镉 Cadmium	≤1ppm	Conform
汞 Mercury	≤0.1ppm	Conform
总菌数 Total Plate count	<1000cfu/g	<10
酵母菌和霉菌 Yeast and mold	<100cfu/g	Conform
沙门氏菌 Salmonella	Absent in 25g	Conform
大肠菌群 Coliforms	≤3MPN/g	Conform

检验员: 古建英 INSPECTOR: Jianying Gu 复核: 古建英 QUALITY CONTROL SECTION: Jianying Gu





SHANDONG YANGCHENG BIOTECHNOLOGY CO., LTD.
NO 1666 DONGHUAN ROAD JUANCHENG COUNTY 274600 CHINA
Tel: +86-537-8956880 Website: www.yangchengshengwu.com

Certificate of Analysis

产品名称 Product name	L-酪氨酸/ L- Tyrosine		
生产日期/ Manufacturing date	2026.05.07	批号/ Batch number	1026050704
检验日期/ Inspection date	2026.05.07	复测日/ Retest date	2029.05.06
执行标准/ Quality standard	USP39	批量/ Quantity	1000KGS
检测项目/ Item	标准/ Limit		检测结果 Results
外观/ Appearance	White crystals or crystalline powder		White crystalline powder
鉴定/Identification	As per USP 39		Conforms
含量/Assay	98.5% ~ 101.5%		99.9%
比旋光度/ Specific rotation[α] _D ²⁵	-9.8° ~ -11.2°		-10.2°
氯化物/Chlorides	≤ 400ppm		< 400ppm
硫酸盐/Sulfates	≤ 400ppm		< 400ppm
铁/ Iron	≤ 30ppm		< 15ppm
铅/Lead	< 3ppm		< 3ppm
镉/ Cadmium	< 1ppm		< 1ppm
汞/ Mercury	< 0.1ppm		< 0.1ppm
重金属/Heavy metals	≤ 15ppm		< 15ppm
砷盐/Arsenic	≤1.5ppm		< 1.5ppm
干燥失重/Loss on drying	≤ 0.30%		0.11%
灼烧残渣/Residue on ignition	≤ 0.40%		0.05%
单杂 single impurity	≤0.5%		<0.5%
总杂 total impurities	≤2.0%		<1.0%
菌落总板数/ Total plate count	≤ 1000cfu/g		<1000cfu/g
酵母菌和霉菌/Yeast&Mould	≤ 100cfu/g		<100cfu/g
致泻大肠埃希氏菌/Coliforms	In 25 g n.d.		Conforms
沙门氏菌/Salmonella	In 25 g n.d.		Conforms
金黄色葡萄球菌 /Staphylococcus aureus	In 25 g n.d.		Conforms
大肠埃希氏菌/Escherichia coli	Negative		Conforms
检测结论/ Conclusion	经检验分析，本品符合 USP39 版标准规定，故判定合格。 The results meet USP39 standard, so it's the qualified product.		

检验人: 蒋彦彦
Inspector: Jiang Yan Yan

复核人: 管廷富
Checker: Guan Ting fu

批准人: 李泽栋
Approver: Li Zedong

Product Name: Betaine anhydrous powder		
Synonym: (Carboxymethyl) trimethylammonium inner salt, Oxyneurine; Trimethylglycine		
CAS number: 107-43-7	EC number: 203-490-6	
Molecular formula: C ₅ H ₁₁ NO ₂	Molecular weight: 117.15 g/ mol	
Standard: Corporation In-house standard	Specification ref.: R1_V1	
Batch Number: BA26030102FG	Manufacturing Date: 01-03-2026	
Expiry Date: 28-02-2029	Principle ref.: BPM259	
Analysis	Specification	Result
Appearance	White crystalline, hygroscopic powder	Conforms
pH [10% solution]	5.0 to 7.0	6.17
Assay (on dried basis) [Titration]	NLT 98.0%	99.74%
Loss on drying (USP<731>)	NMT 2.0%	0.26%
Residue on Ignition (USP<281>)	NMT 0.2%	0.01%
Chloride (USP<221>)	NMT 0.01% [100 ppm]	Conforms
Sulphate (USP<221>)	NMT 0.01% [100 ppm]	Conforms
Sieve analysis	100% through 20 mesh	Conforms
Total heavy metals	NMT 10 ppm	Conforms
Bulk density [Loose]	0.60 to 0.80 g/ ml	0.61 g/ ml
Lead (Pb)	NMT 1 ppm	Conforms
Arsenic (As)	NMT 1 ppm	Conforms
Cadmium (Cd)	NMT 0.2 ppm	Conforms
Mercury (Hg)	NMT 0.1 ppm	Conforms
Chromium (Cr)	NMT 0.2 ppm	Conforms
Total Plate Count	NMT 1000 CFU/ g	Conforms
Yeast & Mould	NMT 100 CFU/ g	Conforms
E. Coli	Negative/ 10 g	Conforms
Salmonella	Negative/ 25 g	Conforms
S. Aureus	Negative/ 10 g	Conforms

Conclusion: This product conforms to the specification and standards mentioned above.

Storage conditions: Store at room temperature, away from heat, light and moisture. This product tends to cake, a too long storage is not advised.

This is a computer-generated report therefore it is valid without signatures.

The information provided in the document is based on our current knowledge and experience, however without any obligation and without any assumption of liability on our part. The information may be used at your discretion and risk. It does not relieve you from carrying out your own precautions and tests. You must comply with all the applicable laws, rules and regulations and observe all third-party rights.

CERTIFICATE OF ANALYSIS

Caffeine Anhydrous Powder

BP, EP, USP, FCC

Original Specification: DFI-992418V07

Chemical formula: $C_8H_{10}N_4O_2$

Batch: 1032505901 Trace:03

Manufacturing date: 01/05/2025

Expiry date: 30/04/2030

Country of origin: China



Direct Food Ingredients

QUALITY IS OUR MAIN INGREDIENT

TEST	SPECIFICATION	RESULT
Appearance	White crystalline powder or silky, white crystals	Conforms
Solubility	Sparingly soluble in water, freely soluble in boiling water, slightly soluble in ethanol (96%). It dissolves in concentrated solutions of alkali benzoates or salicylates. It sublimes readily	Conforms
Identification A (Spectroscopic Identification tests)	Conforms to the USP caffeine RS	Conforms
Identification B (The retention time of caffeine peak)	Corresponds to the standard preparation obtained in the assay	Conforms
Appearance of solution	Clear, colourless	Conforms
Sulfate	Max 500 ppm, mg/kg	<500 ppm, mg/kg
Impurities (A, B, C, D, E, F)	Max 0.1 %	<0.1%
Total impurities	Max 0.1 %	<0.1%
Acidity	Not more than 0.2 ml of 0.01 M sodium hydroxide	<0.2 ml
Individual Impurity (Organic)	Max 0.1 %	<0.1 %
Total impurities (Organic)	Max 0.1 %	<0.1%
Lead	Max 1 mg/kg, ppm	<1 mg/kg,ppm
Alkaloids (Other)	No precipitate is formed	Conforms
Readily Carbonisable Substances	Qualified	Conforms
Melting point	235 - 238 °C	Conforms
Loss on drying	Max 0.5 %	0.06%
Sulphated ash	Max 0.1 %	0.03%

As provided by our supplier

Ref: 1096987 | Created by FM on 20/11/2025 | Approved by PW on 25/11/2025

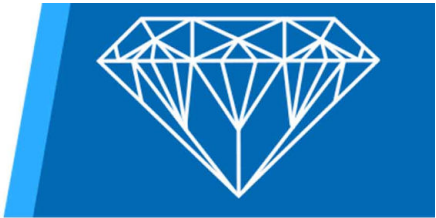
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Company Reg No.3005254



**Direct Food
Ingredients**
QUALITY IS OUR MAIN INGREDIENT

Assay	98.5 - 101 %	99.8%
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Ref: 1096987 | Created by FM on 20/11/2025 | Approved by PW on 25/11/2025

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Email: sales@directfood.net
Company Reg No.3005254

CERTIFICATE OF ANALYSIS**Citric Acid Anhydrous 30-100 Mesh Powder**

BP, EP, USP, FCC, E330, ENSIGN

Original Specification: DFI-486915V05

Chemical formula: $C_6H_8O_7$

Batch: 2AX2604028

Manufacturing date: 24/04/2026

Expiry date: 23/04/2029

Country of origin: China


**Direct Food
Ingredients**

QUALITY IS OUR MAIN INGREDIENT

TEST	SPECIFICATION	RESULT
Identification	Passes test	Conforms
Assay	99.5 - 100.5 %	100.0%
Water	Max 0.5 %	0.05%
Readily Carbonisable Substances	Passes test	Conforms
Sulphated ash (Residue on Ignition)	Max 0.05 %	0.02%
Sulfate	Max 50 mg/kg, ppm	<50 mg/kg, ppm
Oxalate	Max 50 mg/kg, ppm	<50 mg/kg, ppm
Chloride (Cl)	Max 5 mg/kg, ppm	<5 mg/kg, ppm
Lead	Max 0.1 mg/kg, ppm	<0.1 mg/kg, ppm
Arsenic	Max 0.1 mg/kg, ppm	<0.1 mg/kg, ppm
Mercury	Max 0.1 mg/kg, ppm	<0.1 mg/kg, ppm
Aluminium	Max 0.2 mg/kg, ppm	<0.2 mg/kg, ppm
Heavy metals	Max 5 mg/kg, ppm	<5 mg/kg, ppm
Bacterial Endotoxin	<0.5 IU/mg	<0.5 IU/mg
Appearance of solution	Passes test	Conforms

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Ref: 1130032 | Created by FM on 07/05/2026 | Approved by PW on 08/05/2026

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Assessment Scheme
Scheme ID 46700

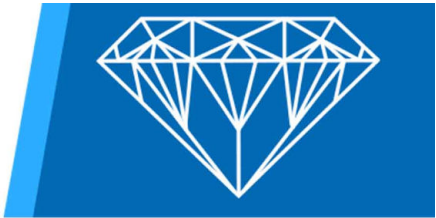
UFAS
Universal Food
Assessment Scheme
Scheme ID 6085

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Company Reg No.3005254

CERTIFICATE OF ANALYSIS

Maltodextrin DE 18-20

Original Specification: DFI-539446V02
Chemical formula: C₁₂H₂₄O₁₁
Batch: 25122232
Manufacturing date: 22/12/2025
Expiry date: 21/12/2027
Country of origin: China



Direct Food
Ingredients
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TEST	SPECIFICATION	RESULT
Appearance	White Crystalline or crystal powder, sweet	Conforms
DE	18 - 20 %, m/m	18.6% m/m
Starch	Negative	Conforms
Moisture	Max 6 %, m/m	5.6 % m/m
Solubility	Min 98 %, m/m	99.3%
pH (10% solution)	4.5 - 6.5	5.2
Ash	Max 0.6 %	0.02%
Iodine (Experiment)	No blue reaction	Conforms
Arsenic	Max 0.5 mg/kg, ppm	<0.5 mg/kg, ppm
Lead	Max 0.5 mg/kg, ppm	<0.5 mg/kg, ppm
Sulphur Dioxide (SO2)	Max 10 mg/kg, ppm	<10 mg/kg, ppm
Total plate count	Max 100 cfu/g	<100 cfu/g
Cadmium	<0.1	Conforms
Mercury	<0.1	Conforms
Coliforms	Max 10 cfu/g	<10cfu/g

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Ref: 1103776 | Created by FM on 02/01/2026 | Approved by PW on 05/01/2026

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CERTIFICATE OF ANALYSIS

Sucralose Powder 100 Mesh

GB, EP, USP, FCC, JECFA, JP

Original Specification: DFI-278698V03

Chemical formula: $C_{12}H_{19}Cl_3O_8$

Batch: S202602004

Manufacturing date: 02/02/2026

Expiry date: 01/02/2028

Country of origin: China



Direct Food Ingredients

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TEST	SPECIFICATION	RESULT
HPLC	Meets requirements	Conforms
Appearance	White crystalline powder	Conforms
Assay (on anhydrous basis)	98 - 102 %	99.86%
Water	Max 2 %	0.12%
Specific Optical Rotation ((a) D20)	+84.0° ~ +87.5°	+86.2°
Residue on ignition (Sulphated Ash)	Max 0.7 %	0.09%
Hydrolysis Products (Impurities H & I)	Max 0.1 %	Conforms
Hydrolysis Products (Chlorinated Monosaccharides)	Max 0.1 %	Conforms
Related Substances	Max 0.5 %	Conforms
Related Substances (Other Chlorinated Disaccharide)	Max 0.5 %	Conforms
Triphenylphosphine Oxide	Max 150 mg/kg, ppm	Conforms
Methanol	Max 0.1 %	Not detected
Heavy metals	Max 10 mg/kg, ppm	Conforms
Arsenic	Max 3 mg/kg, ppm	Conforms
Lead	Max 1 mg/kg, ppm	Conforms
Particle size (Through 100 mesh)	Min 80 %	Min 90%
Total Aerobic Plate Count	Max 250 cfu/g	< 10 cfu/g
Coliforms	< 3 MPN/g	None
Yeasts	Max 50 cfu/g	<10 cfu/g
Moulds	Max 50 cfu/g	<10 cfu/g
Escherichia Coli	Negative /25g	Conforms
Salmonella	Negative /25g	Conforms
Iron (Fe)	Max 10 mg/kg, ppm	Conforms

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Ref: 1115644 | Created by FM on 26/02/2026 | Approved by PW on 27/02/2026

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pH (10% aqueous solution)	5 - 7	6.26
Mercury	Max 0.1 mg/kg, ppm	Conforms

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Product Name: L-Citrulline base powder [Vegan]		
Synonym: (S)-2-Amino-5-ureidopentanoic acid; L-2-Amino-5-ureidovaleric acid		
CAS number: 372-75-8	EC number: 206-759-6	
Molecular formula: C ₆ H ₁₃ N ₃ O ₃	Molecular weight: 175.19 g/ mol	
Standard: AJI92	Specification ref. R1_V1	
Batch Number: C512511004	Manufacturing Date: 16.11.25	
Expiry Date: 15.11.28	Principle ref.: BPM347	
Analysis	Specification	Result
Appearance	White crystals or crystalline powder	Conforms
Taste	Slightly sweet taste	Conforms
Identification	To meet the requirements (Chromogenic reaction as per AJI)	Conforms
Solubility	Soluble in water	Conforms
Specific Rotation	+24.5° to + 26.8°	+25.5°
pH	5.0 to 7.0	5.8
Transmittance	NLT 98.0%	99.5 %
Assay [Titration] [On anhydrous basis]	98.5 to 101.0%	99.5 %
Loss on drying	NMT 0.30%	0.18 %
Sulphated ash	NMT 0.10%	0.03 %
Chloride (Cl)	NMT 0.020% [200 ppm]	< 0.02 %
Sulphate	NMT 0.020% [200 ppm]	< 0.02 %
Ammonium	NMT 0.02% [200 ppm]	< 0.02 %
Iron (Fe)	NMT 10 ppm	< 10 ppm
Sieve analysis	80% pass through 60 Mesh 95% pass through 40 Mesh	93.4% 97.5%
Bulk density [Loose]	0.40 g/ ml to 0.60 g/ ml	0.50 g/ ml
Bulk density [Tapped]	0.50 g/ ml to 0.90 g/ ml	0.71 g/ ml
Heavy metal (Pb)	NMT 10 ppm	< 10 ppm
Lead (Pb)	NMT 1 ppm	Not detected
Arsenic (As)	NMT 1 ppm	< 1 ppm
Cadmium (Cd)	NMT 1 ppm	Not detected
Mercury (Hg)	NMT 0.1 ppm	Not detected
Total plate count	NMT 1000 CFU/ g	< 1000 CFU/ g
Yeast and mould	NMT 100 CFU/ g	< 100 CFU/ g

E. Coli	Negative/ g	Conforms
Salmonella	Negative/ 375 g	Conforms
Staphylococcus aureus	Negative/ 25 g	Conforms

Conclusion: This product conforms to the specification and standards mentioned above.

Storage conditions: Store at room temperature, away from heat, light and moisture.

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Product Name: L-Threonine powder [Vegan]		
Synonym: (2S,3R)-2-Amino-3-hydroxybutyric acid		
CAS number: 72-19-5	EC number: 200-774-1	
Molecular formula: C ₄ H ₉ NO ₃	Molecular weight: 119.12 g/ mol	
Standard: USP	Specification ref.: R0_V1	
Batch Number: 260310362H	Manufacturing Date: 10-03-2026	
Expiry Date: 09-03-2029	Principle ref.: BPM392	
Analysis	Specification	Result
Appearance	White crystalline powder or white crystals	Conforms
Identification [IR]	Must conform to the reference standard	Conforms
Solubility	Freely soluble in water, insoluble in alcohol, ether and chloroform	Conforms
Solubility [Turbidity] [50 mg/ml water]	Clear, colourless solution	Conforms
Specific rotation $[\alpha]_D^{20}$	-26.7° ~ -29.1°	-27.7°
pH	5.0 ~ 6.5	5.8
Assay [Titration] [On anhydrous basis]	98.5% ~ 101.5%	99.2%
Chromatographic purity	Total impurities: NMT 2.0% Single impurity: NMT 0.5%	Conforms
Organic volatile impurities	Meets the requirements	Conforms
Loss on drying	NMT 0.2%	0.13%
Residue on ignition	NMT 0.4%	0.08%
Chloride (Cl)	NMT 0.05% [500 ppm]	<0.05%
Sulphate (SO ₄)	NMT 0.03% [300 ppm]	<0.03%
Iron (Fe)	NMT 0.003% [30 ppm]	<0.003%
Heavy Metals (Pb)	NMT 15 ppm	Conforms
Lead	NMT 3 ppm	<3 ppm
Arsenic	NMT 1 ppm	<1 ppm
Cadmium	NMT 1 ppm	0.09 ppm
Mercury	NMT 0.1 ppm	0.09 ppm
Total plate count	NMT 1000 CFU/ g	Conforms
Yeast & Mould	NMT 100 CFU/ g	Conforms
E. Coli	Negative/ g	Conforms

Salmonella	Negative/25 g	Conforms
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Conclusion: This product conforms to the specification and standards mentioned above.

Storage conditions: Store in a well closed container at room temperature, away from heat, light and moisture.

Remarks: *The product supplied by Vita Actives shall comply with the one or all the above mentioned standards unless a particular standard is requested by the customer. For exact monograph reference, please refer to a typical certificate of analysis.*

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PRODUCT CODE	PRODUCT NAME	ACTIVE MARKER
RM 0052	L-Citrulline Nitrate	-

FACTORY NAME	BATCH NUMBER	MANUFACTURE DATE	EXPIRY DATE
SHANGHAI FUZHISHENG BIO TECHNOLOGY CO., LTD	20260512	2026-05-12	2028-05-11

Item	Specification	Result	Method
Physical & Chemical Analysis			
Description	White or off-white powder	Conforms	In-house
Assay	97.0% to 102%	98.64%	In-house
Melt point	125 to 144°C	139°C	In-house
Residue on ignition	Not more than 0.60%	0.52%	In-house
Loss on drying	Not more than 1.0%	0.38%	In-house
Bulk density	0.5 to 0.6g/ml	0.56g/ml	In-house
Tapped density	0.6 to 0.8g/ml	0.69g/ml	In-house
Heavy Metals & Agricultural Residues			
Heavy metals	Not more than 10ppm	Conforms	In-house
Lead	Not more than 3ppm	Conforms	In-house
Arsenic	Not more than 1ppm	Conforms	In-house
Cadmium	Not more than 1ppm	Conforms	In-house
Mercury	Not more than 0.1ppm	Conforms	In-house
Microbiological			
Total Plate Count	Not more than 1000cfu/g	Conforms	In-house
Yeast and Mould	Not more than 100cfu/g	Conforms	In-house
E.Coli	Negative in 10g	Negative	In-house
Salmonella	Negative in 10g	Negative	In-house

Packaging & Storage	Shelf Life: 2 years from production
Conclusion	Qualified

Reviewed By:

Kenny Chen**Infinova Nutra Ltd**

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Email: oli@infinovanutra.com | kenny@infinovanutra.com | www.infinovanutra.com

Product Name: Taurine powder		
Synonym: 2-aminoethanesulfonic acid		
CAS number: 107-35-7		EC number: 203-483-8
Molecular formula: C2H7NO3S		Molecular weight: 125.15 g/ mol
Standard: JP		Specification ref.: R0_V2
Batch number: XP26014731		Manufacturing date: 26.01.26
Expiry date: 25.01.29		Principle ref.: BPM183
Description: Taurine occurs as colourless or white crystals or a white crystalline powder. It is soluble in water, and practically insoluble in ethanol.		
Analysis	Specification	Result
Appearance	A white Crystalline odourless powder	Conforms
Identification [IR]	Must conform to the requirements	Conforms
pH	4.1 – 5.6	4.9
Clarity and colour of solution	Clear and colourless	Conforms
Assay [Titration] [On anhydrous basis]	99.0% to 101.0%	99.5%
Related substances	To comply with the requirements	Conforms
Loss on drying	NMT 0.2%	0.12%
Residue on Ignition	NMT 0.1%	0.08%
Chloride	NMT 0.011% [110 ppm]	<0.010%
Iron	NMT 10 ppm	<10 ppm
Sulphate	NMT 0.01% [100 ppm]	<0.010%
Ammonium	NMT 0.02% [200 ppm]	<0.015%
Heavy metals	NMT 10 ppm	<8 ppm
Total microbial count	NMT 1000 CFU/g	<10 CFU/g
Yeast & mould	NMT 100 CFU/g	<10 CFU/g
E. Coli	Absent/ g	Not detected
Salmonella	Absent/ 25 g	Not detected

Conclusion: This product conforms to the Specification and standards mentioned above.

Storage conditions: Store at room temperature, away from heat, light and moisture.

Remarks: For exact monograph reference, please refer to a typical certificate of analysis.

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