

CERTIFICATE OF ANALYSIS

Name: **L-Citrulline DL-Malate 2:1**

Quantity: **2000kg**

Batch No.: **C572205001**

Production Date: **6th May, 2022**

Analysis Date: **8th May, 2022**

Re-Test Date: **5th May, 2024**

Country of Origin: **China**

Item	Specification	Results	Test Method
Description	White crystalline powder	White crystalline powder	Organoleptic
Identification	In accordance with standard retention time	Conforms	HPLC
Optical Rotation	+16.5° - +18.5°	+17.1°	ChP2020
Solubility	Clear	Clear	ChP2020
Loss on drying	NMT 0.3%	0.12%	ChP2020
Residue on ignition	NMT 0.1%	0.03%	ChP2020
Chloride	NMT 0.02%	LT 0.02%	ChP2020
Sulfate	NMT 0.02%	LT 0.02%	ChP2020
Ammonium	NMT 0.02%	LT 0.02%	ChP2020
Heavy Metals	NMT 15ppm	LT 15ppm	ChP2020
Lead	NMT 0.1ppm	LT 0.1ppm	GB 5009.12-2017 I
Total mercury	NMT 0.1ppm	LT 0.1ppm	GB 5009.12-2014 I
Cadmium	NMT 1ppm	LT 1ppm	GB 5009.15-2014
Arsenic	NMT 1ppm	LT 1ppm	ChP2020
Iron	NMT 10ppm	LT 10ppm	ChP2020
Assay	NLT 98.5%	99.8%	HPLC
L-Citrulline	62.5% - 74.2%	66.19%	HPLC
DL-Malate	25.8% - 37.5%	33.57%	HPLC
Total plate count	NMT 1000 cfu/g	LT 1000 cfu/g	ChP2020
Yeast and Mould	NMT 100 cfu/g	LT 100 cfu/g	ChP2020
Coliforms	NMT 100 cfu/g	LT 100 cfu/g	ChP2020
E.coli	Absence/g	Conforms	ChP2020

Salmonella	Absence/g	Conforms	ChP2020
Staph. Aureus	Absence/g	Conforms	ChP2020

Conclusion: Conforms to enterprise standard.

█ cannot anticipate all conditions under which this information and the products may be used. Users are advised to make their own tests to determine the safety and suitability of each product for their own purpose. Any recommendation or suggestion are made without warranty or guarantee, since the condition of use are beyond Nutra's control.