



开原亨泰营养科技有限公司

Kaiyuan Hengtai Nutrition Co., Ltd.

Certificate of Analysis

Ingredient Name: L-Carnitine L-Tartrate
Batch Number: 10100220220321
Quantity: 1000KGS
Country of Origin: China
Date of Manufacture: .12.23,2022
Date of Re-Test : .12.22 2024

Item	Standard	Results	Method
Appearance	White crystalline powder	White crystalline powder	Organoleptic
Identification	Chemical method	Positive	USP
Specific Rotation	-9.5°~-11.0°	-10.03°	USP
pH	3.0~4.5	3.58	USP
Loss On Drying	≤0.5%	0.22%	USP
Melting Point	169°C~175°C	170.0°C~171.5°C	USP
Residue on Ignition	≤0.2%	0.04%	USP
Assay			
L-Carnitine	68.2%±1.0%	68.12%	Titration
L-Tartaric acid	31.8%±1.0%	31.62%	Titration
Residue Solvents (Ethanol)	≤5000ppm	285ppm	USP
Heavy Metals	≤10ppm	<10ppm	USP
Arsenic	≤1ppm	<1ppm	USP
Chloride	≤4000ppm	<4000ppm	USP
Cyanide	Absent	Absent	Ch.P.
Lead	≤3ppm	<3ppm	USP
Mercury	≤0.1ppm	<0.1ppm	USP
Cadmium	≤1ppm	<1ppm	USP
Retained on us sieve#20	Report	0.00%	Ch.P.
Retained on us sieve#40	Report	36.42%	Ch.P.
Retained on us sieve#60	Report	57.95%	Ch.P.
Retained on us sieve#80	Report	4.30%	Ch.P.

We certify that this batch of **L-Carnitine L-Tartrate** conforms to Inhouse Standards.

Analysts 徐娜

Checker 高伟

Supervisor 刘永海

