FEIMING CHEMICAL LIMITED

Certification of Analysis

Ingredient Name: **L-Carnitine USP**
Batch Number: 10100120130710
Quantity: 1000KGS
Country of Origin: China
Date of Manufacture: July.05, 2013
Date of Re-Test: July.04, 2015

Item	Standard	Results	Method
Appearance	White crystals or crystalline powder	White crystalline powder	Organoleptic
Identification	IR	Positive	USP<197>
Appearance of Solution	Clear and Colorless	Clear and Colorless	Ph.Eur.2.2.1
Specific Rotation	-29.0°~-32.0°	-31.20°	USP<781>
PH	5.5~9.5	7.43	USP<791>
Loss on Drying	≤0.5%	0.34%	USP<731>
Assay	97.0%~103.0%	99.68%	Titration
Residue on Ignition	≤0.1%	0.03%	USP<281>
Residual Solvents:			
Residue Acetone	≤1000ppm	Conforms	GC
Residue Ethanol	≤5000ppm	Conforms	GC
Heavy Metals	≤10ppm	<10ppm	USP<231>
Arsenic	≤1ppm	<1ppm	USP<211>
Chloride	≤0.4%	<0.4%	USP<211>
Potassium	≤0.2%	<0.2%	USP<851>
Sodium	≤0.1%	<0.1%	USP<851>
Cyanide	Absent	Absent	Ch.P.2010Appendix Ⅷ F Method Ⅰ
Lead	≤3ppm	<3ppm	USP<251>
Mercury	≤0.1ppm	<0.1ppm	USP<730>
Cadmium	≤1ppm	<1ppm	USP<233>
Total Plate Count	≤1000Cfu/g	30Cfu/g	USP<2021>
Yeast & Mold	≤100Cfu/g	10Cfu/g	USP<2021>
E.Coli	Negative	Negative	USP<2022>
Salmonella	Negative	Negative	USP<2022>

We certify that this batch of L-Carnitine conforms to the current USP.

Responsible Person: Chendong Analyst: Zhangmin