



瑾 岚 医 药 技 术 开 发 有 限 公 司  
 JINLAN PHARM-DRUGS TECHNOLOGY CO., LIMITED  
 Hangzhou ROYAL Import & Export Co.,Ltd.

## Certificate of Analysis

Product Name	L-CARNITINE BASE	Batch No.:	RY190212
Quantity:	100KG	CAS NO.	541-15-1
Manufacture Date:	2019.02.12	Expiry Date:	2022.02.11
Item	Specification	Analytical Result	
Assay	98.0%-102.0%	99.5%	
Appearance	White or almost white, crystalline powder colorless crystals,hygroscopic	Conforms	
Identification	A:Specific optical rotation B: IR spectrum	Conforms	
Appearance of solution	Clear and colorless	Conforms	
Particle size	Passed 20 mesh	Conforms	
PH	6.5 – 8.5	7.5	
Specific optical rotation	-29° ~ -32.0°	-31.2°	
Related substances impurity A	≤0.5%	0.0024%	
Other individual impurity	≤ 0.1%	0.032%	
Chlorides	≤ 200PPM	Conforms	
Sulphates	≤ 300PPM	Conforms	
Sulphated ash	≤ 0.1%	0.05%	
Heavy metals	≤ 10PPM	Conforms	
Water	≤1.0%	0.060%	
Residual solvents Methanol	Should not be detected	N.D.	
Residual solvents Ethanol	≤ 0.5%	0.04%	
Microbiological Limit	Total plate count: ≤100CFU/g	<10CFU/g	
	Yeast and moulds: ≤10CFU/g	<10CFU/g	
	Salmonella should not be detected	N.D.	
	E.coli should not be detected	N.D.	
	Endotoxins ≤0.1EU/mg	≤0.1EU/mg	
Standard: it conforms to EP9.0.			



Tested by: Cherry

Checked by: Alice

Approved by: Mich