

CERTIFICATE OF ANALYSIS

Product Name	Acetyl L-Carnitine HCL	Batch Number	10100420170305
CAS Number	5080-50-2	Manufacture Date	Mar 12, 2017
Quantity	150.0Kg	Expire Date	Mar 11, 2019

Item	Specifications	Results	Method
Appearance	White crystalline powder	Conforms	Observation
Identification	IR	Conforms	USP
Appearance of Solution	Clear and Colorless	Conforms	Ph.Eur.
Specific Rotation	-26.0°~-29.0°	-27.37°	USP
pH	2.3~2.6	2.46	USP
Loss on Drying	≤0.5%	0.21%	USP
Assay	98.5%~102.0%	99.98%	Titration
Residue on Ignition	≤0.5%	0.04%	USP
Heavy Metals	≤10ppm	<10ppm	USP
Arsenic	≤1ppm	<1ppm	USP
Cyanide	Absent	Conforms	Ch.P.
Lead	≤3ppm	<3ppm	USP
Mercury	≤0.1ppm	<0.1ppm	USP
Cadmium	≤1ppm	<1ppm	USP