

CERTIFICATE OF ANALYSIS

Product Name:	<u>L-Citrulline DL-Malate(1:1)</u>	Report Date:	<u>Jul 05, 2017</u>
Formula:	<u>C₁₀H₁₉N₃O₈</u>	Batch No.:	<u>170702</u>
CAS No.:	<u>54940-97-5</u>	Manu. Date:	<u>Jul 02, 2017</u>
Inspection Standard:	<u>In-house</u>	Exp. Date:	<u>Jul 01, 2019</u>

RESULTS OF ANALYSIS

Test Items	Specifications	Results	Test Methods
Description	White crystals or crystalline powder	Conforms	Visual
Specific rotation $[\alpha]_D^{20}$	+13.5 to 15.5°(8g/100ml, 6N HCl)	+14.3°	AJI Test 1
Chloride(Cl)	Not more than 0.05%	<0.05%	AJI Test 3
Iron(Fe)	Not more than 10ppm	<10ppm	AJI Test 6
Heavy metals(Pb)	Not more than 10ppm	<10ppm	AJI Test 7
Arsenic(as As ₂ O ₃)	Not more than 1ppm	<1ppm	AJI Test 8
Loss on drying	Not more than 0.3%	<0.25%	AJI Test 11
Residue on ignition(sulfated)	Not more than 0.1%	0.04%	AJI Test 13
Assay	98.0% to 102.0%	99.7%	Liquid Chromatography
Lead	Not more than 3ppm	<3ppm	AFS
Cadmium	Not more than 1ppm	<1ppm	AFS
Mercury(Hg)	Not more than 1ppm	<1ppm	AFS
Conclusion:	Conforms to the specifications of in-house standards		

Analyst: **侯健之**Auditor: **辽薛兰**Chief of QC: **于铁梅**