


# CERTIFICATE OF ANALYSIS

Product Name:	L-Alanine	Report Date:	Aug 04, 2017
Formula:	C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub>	Batch No.:	170802
CAS No.:	56-41-7	Manu. Date:	Aug 02, 2017
Inspection Standard:	USP40	Exp. Date:	Aug 01, 2019

## RESULTS OF ANALYSIS

Test Items	Specifications	Results
Appearance	White crystals or crystalline powder	Conforms
Identification	Infrared Absorption	Conforms
Specific rotation [ $\alpha$ ] <sub>D</sub> <sup>25</sup>	+13.7 to +15.1°	+14.2°
Chloride(Cl)	Not more than 0.05%	<0.05%
Sulfate(SO <sub>4</sub> )	Not more than 0.03%	<0.03%
Heavy Metals(Pb)	Not more than 15ppm	<15ppm
Iron(Fe)	Not more than 30ppm	<30ppm
Related Compounds	As per USP40	Conforms
Loss on drying	Not more than 0.2%	0.08%
Residue on ignition(sulfated)	Not more than 0.15%	0.05%
Assay	98.5% to 101.5%	99.1%
PH	5.5 to 7.0	5.8
<b>Conclusion:</b>	Conforms to the specifications of USP40.	

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