



**HAIHANG INDUSTRY CO., LTD.**

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## CERTIFICATE OF ANALYSIS

**Product Name: L-Proline**

**Reference standard: Customer**

**Batch No.: 20170219**

**Date of analysis: 2017/02/19**

**Manufacture date: 2017/02/19**

**Expiry Date: 2018/02/18**

**Quantity: 1000KGS**

**Packing: 25KGS NET/DRUM**

Analysis Contents	Analysis Standard	Analysis Results
Specific Rotation[20/D]	-84.0 to ~-86.0Degree (C=4 in H <sub>2</sub> O)	-84.25
Appearance	White to almost white crystalline powder	Conforms
State of solution (transmittance)	≥95.0%	98.2%
Ammonium	≤200ppm	<200ppm
Heavy metals(Pb)	≤10ppm	<10ppm
Sum of other amino acids	≤0.5%	<0.5%
Loss on drying	≤0.5%	0.12%
Residue on ignition	≤0.1%	0.05%
Assay	≥98.5%	99.70%
Escherichia coli Salmonella Staphylococcus aureus Pseudomonas aeruginosa	Negative	Negative
Total viable aerobic count	≤100CFU/g	<100CFU/g
Yeasts and moulds	≤10CFU/g	<10CFU/g
<b>Result:</b>	<b>The above product conforms to the requirements.</b>	

**Analyst: Liya**

**Inspector: Xuleilei**

**Director of QC: Weichen**