



大连汉德姆精细化学品有限公司

DALIAN HANDOM CHEMICALS CO.,LTD.

Certificate of Analysis

Product Name: L-Theanine

CAS No.: 3081-61-6

Batch No.: HDC20230515

Batch Quantity: 300.00kg

Manufacturing Date: May 15th, 2023

Retest Date: May 14th, 2025

Test Items	Specifications	Test Results
Appearance	White or yellowish granular crystals or powder crystals	Conforms
Identification	Meets the requirements	Conforms
Specific Rotation $[\alpha]_D^{20}$	+7.7° to +8.5°(on the anhydrous basis)	+7.9°
pH Value	4.5 ~ 6.0	5.6
State of Solution	Not less than 98.0%	99.7%
Chloride(Cl)	Not more than 0.02%	<0.02%
Sulfate(SO ₄)	Not more than 0.02%	<0.02%
Arsenic(as As ₂ O ₃)	Not more than 1 ppm	<1 ppm
Other Amino Acids	Not more than 0.5%	<0.5%
Loss on Drying	Not more than 1.5%	0.18%
Residue on Ignition(Sulfated)	Not more than 0.10%	0.03%
Heavy Metals(as Pb)	Not more than 10 ppm	<10 ppm
Assay	98.5% ~ 101.5%	99.6%

Conclusion: The testing results of this batch are complied with the In-house Standard.

Storage Conditions: Preserved in tight, light-resistant containers; kept at room temperature away from heat and moisture.