



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-Citrulline

**Molecular Formula:** C<sub>6</sub>H<sub>13</sub>N<sub>3</sub>O<sub>3</sub>

**Batch No.:** HDC20230402

**Manufacturing Date:** Apr 2<sup>nd</sup>, 2023

**CAS No.:** 372-75-8

**Molecular Weight:** 175.19

**Batch Quantity:** 1000.00kg

**Retest Date:** Apr 1<sup>st</sup>, 2025

Test Items	Specifications	Test Results
Appearance	White crystals or crystalline powder	Conforms
Identification	Meets the requirements	Conforms
Specific Optical Rotation[α] <sub>D</sub> <sup>25</sup>	+24.5° ~ +26.8°	+25.6°
State of Solution	Not less than 98.0%	99.3%
Chloride (Cl)	Not more than 0.020%	<0.020%
Ammonium (NH <sub>4</sub> )	Not more than 0.02%	<0.02%
Sulfate (SO <sub>4</sub> )	Not more than 0.020%	<0.020%
Iron (Fe)	Not more than 10 ppm	<10 ppm
Heavy Metals (as Pb)	Not more than 10 ppm	<10 ppm
Arsenic (As <sub>2</sub> O <sub>3</sub> )	Not more than 1 ppm	<1 ppm
Loss on Drying	Not more than 0.30%	0.13%
Residue on Ignition	Not more than 0.10%	0.05%
Assay	98.5% ~ 101.0%	99.4%
pH Value	5.0 ~ 7.0	6.0

**Conclusion:** The testing results of this batch are complied with the Standard of AJI92.

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