

CERTIFICATE OF ANALYSIS

Product Name: L-Arginine HCL	
Batch No.: 20220202	Quantity: 100kg
Manufacture Date: 2 nd Feb, 2022	Retest Date: 1 st Feb, 2024
Reference Standard:	USP32

Item	Specification	Results
Appearance	White to off White crystalline or crystalline powder.	Conforms
Identification	Infrared Absorption. Concordant with the reference spectrum.	Conforms
Assay	98.5% to 101.5%	99.3%
Specific rotation [α] _{D20}	+21.4° to +23.6°	+21.8°
Assay	98.5 ~ 101.5%	99.9%
pH	4.7 ~ 6.2	5.4
State of Solution	More than 98.0%	98.9%
Loss on Drying	Not more than 0.20%	0.13%
Residue on Ignition	Not more than 0.10%	0.07%
Chloride (Cl)	16.5 - 17.1%	16.9%
Sulphate (SO ₄)	Not more than 0.03%	<0.03%
Heavy Metals	Not more than 15ppm	<15ppm
Arsenic (As)	Not more than 0.5ppm	<0.5ppm
Cadmium	Not more than 1ppm	<1ppm
Lead	Not more than 3ppm	<3ppm
Mercury	Not more than 0.1ppm	0.1ppm
Chromatographic Purity	Not more than 0.5% of any individual impurity is found; Not more than 2.0% of total impurities is found.	Conforms
Organic volatile impurities	Meets the requirements	Conforms
Conclusion:	Conforming with the standard of USP32	