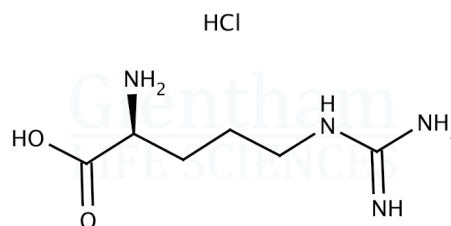


## Certificate of Analysis

Product Name	L-Arginine hydrochloride, 99%, non-animal origin
Glentham Code	GM1323
CAS Number	1119-34-2
EINECS	214-275-1
Batch Number	421QJU
Molecular Weight	210.67
Molecular Formula	$C_6H_{14}N_4O_2 \cdot HCl$
Storage Temp.	+20°C



Property	Specification	Batch 421QJU
Physical Description	White or almost white crystalline powder or colourless crystals	White crystalline powder
Solubility (5% in water)	Clear, colourless solution	Conforms
pH (5% in water)	4.7 - 6.2	5.6
Specific Optical Rotation ( $[\alpha]_{20/D}$ )	+21.0 - +23.5 °	+22.6°
Residue on Ignition	≤ 0.1%	0.04%
Sulphate (SO <sub>4</sub> )	≤ 0.02%	Conforms
Ammonium (NH <sub>4</sub> )	≤ 0.02%	Conforms
Loss on Drying	≤ 0.5%	0.1%
Assay	≥ 99.0%	100.1%

Specification Version	v1.0
Manufacture Date	2023-07-11
Re-Test Date	2032-08-23

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glentham.com](http://www.glentham.com) or contact us using the details above for the current version of this document.

This document was generated electronically and is therefore valid without signature. © Glentham Life Sciences Ltd, 2025