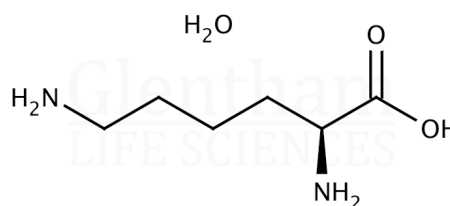


Certificate of Analysis

Product Name	L-Lysine monohydrate, 99%
Glentham Code	GM1100
CAS Number	39665-12-8
EINECS	200-294-2
MDL Number	MFCD00151035
Batch Number	317OLH
Molecular Weight	164.21
Molecular Formula	$C_6H_{14}N_2O_2 \cdot H_2O$
Storage Temp.	+20°C



Property	Specification	Batch 317OLH
Physical Description	White to light yellow crystalline powder	Light yellow crystalline powder
Identification	IR	Conforms
pH (2.5% in water)	9.0 - 10.5 (at 25°C)	9.4
Heavy Metals	≤ 10ppm	Conforms
Residue on Ignition	≤ 0.1%	Conforms
Other Amino Acids	≤ 0.5%	Conforms
Specific Optical Rotation ($[\alpha]_{20/D}$)	+22 - +27 ° (c=8, 6M HCl)	+24.6°
Chloride (Cl)	≤ 0.03%	Conforms
Sulphate (SO4)	≤ 0.02%	Conforms
Ammonium (NH4)	≤ 0.02%	Conforms
Iron (Fe)	≤ 10ppm	Conforms
Water	10.0 - 11.5 %	10.1%
Assay (Titration)	99.0 - 101.0 %	99.1%

Specification Version	v1.0
Manufacture Date	2024-03-05
Re-Test Date	2032-02-01

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 or contact us using the details above for the current version of this document.

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