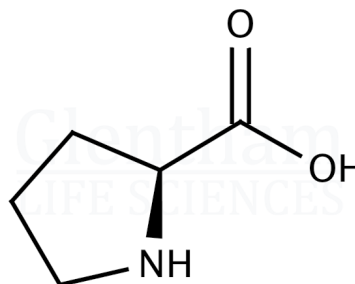


Certificate of Analysis

Product Name L-Proline
Glentham Code GM1129
CAS Number 147-85-3
EINECS 205-702-2
MDL Number MFCD00064318
PubChem SID 310279253
Batch Number 552CZE

Molecular Weight 115.13
Molecular Formula $C_5H_9NO_2$
Storage Temp. +20°C



Property	Specification	Batch 552CZE
Physical Description	White crystals or crystalline powder	White crystalline powder
Assay	99.0 - 101.0 % (anhydrous)	100.3%
Identification (IR)	To conform to standard	Conforms
Residue on Ignition	≤ 0.1%	< 0.1%
Chloride (Cl)	≤ 0.05%	< 0.05%
Sulphate (SO ₄)	≤ 0.03%	< 0.03%
Iron (Fe)	≤ 30ppm	< 30ppm
Heavy Metals (as Pb)	≤ 10ppm	< 10ppm
Organic Impurities	Any Individual Impurity: ≤ 0.5%	< 0.5%
	Total impurities: ≤ 2.0%	< 2.0%
Specific Optical Rotation	-84.5 - -86.0 °	-85.0°
Loss on Drying	≤ 0.4%	0.1%
Lead (Pb)	≤ 3ppm	< 0.04ppm
Arsenic (As)	≤ 1ppm	< 0.01ppm
Mercury (Hg)	≤ 0.1ppm	< 0.01ppm
Cadmium (Cd)	≤ 1ppm	< 0.003ppm
Pharmacopoeia Specification(s)	Conforms to USP	Conforms

Specification Version v1.1
Manufacture Date 2022-09-01
Re-Test Date 2029-10-27

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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