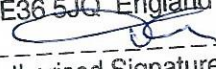


**CERTIFICATE OF ANALYSIS**

Product Name: L-ALANINE  
 CAS Number: 56-41-7  
 Batch Number: 19/MFM/2340  
 Expiry Date: 12 June 2027  
 Molecular Weight: 89.09  
 Molecular Formula: C3H7NO2  
 Storage Temperature: + 20°C

For and on behalf of  
 FORMEDIUM Ltd, Unit 1B  
 Hunstanton Commercial Park  
 PE36 5JQ England

  
 (Authorised Signature)

TESTS	SPECS	RESULTS
Assay	98.5% to 101.0%	99.52%
Physical description	White crystalline powder	Complies
Specific Optical Rotation:	+13.5° to +15.5°	+ 14.67°
pH	5.7 to 6.7	6.1
Loss on Drying	< = 0.2%	0.05%
Lead (Pb)	<= 3 ppm	Conforms
Iron (Fe)	< 10 ppm	< 5 ppm
Cadmium (Cd)	<= 1 ppm	Conforms
Mercury (Hg)	<= 0.1 ppm	Conforms
Chloride (Cl)	<= 0.02%	< 0.01%
Sulphate (SO4)	< = 0.03%	< 0.01%
Sulphated Ash	< = 0.1 ppm	0.07%
Pharmacopoeia Specification(s)	Conforms to EP	Conforms

\* This material is supplied for laboratory use only.

Supplier: Formedium Ltd

Approved by:



Date:

25 JUN 2019