

CERTIFICATE OF ANALYSIS

PRODUCT NAME: L-Cysteine
 GRADE: USP30
 CAS NO. 52-90-4
 BATCH NO. 18/MFM/2177
 MOLECULAR WEIGHT: 121.16
 EXPIRY DATE: July 2024
 STORAGE TEMPERATURE: + 4 °C

TESTS	SPECS	RESULTS
Description	White crystalline powder	Complies
Specific optical rotation	+8.3° - +9.5°	+8.5°
State of solution	NLT95.0%	99.0%
Loss on drying	NMT0.5%	0.3%
Residue on drying	NMT0.1%	0.08%
Ammonium (NH4)	NMT 0.02%	conforms
Sulphate (SO4)	NMT0.03%	conforms
Heavy metals	NMT10ppm	conforms
Chloride (Cl)	NMT0.05%	conforms
Fe	NMT10 ppm	< 10 ppm
Lead (Pb)	NMT 3 ppm	conforms
Cadmium (cd)	NMT 1 ppm	conforms
Mercury (Hg)	NMT 0.1 ppm	conforms
Arsenic (As)	NMT1PPM	conforms
PH	4.5 - 5.5	5.1
Assay	98.0 to 101.0%	98.7%

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

* This material is supplied for laboratory use only.

Supplier: Formedium Ltd

Approved by:



(Authorised Signature)

Date: 02 Aug 2018