NATURE SCIENCE TECHNOLOGIES

E-mail: inquiries@nstchemicals.com

nstchemicals.com

Phone: +371 24220280

CERTIFICATE OF ANALYSIS

Biotin

LOT EX0402

Catalog No.: NST-12-8

CAS No.: 58-85-5

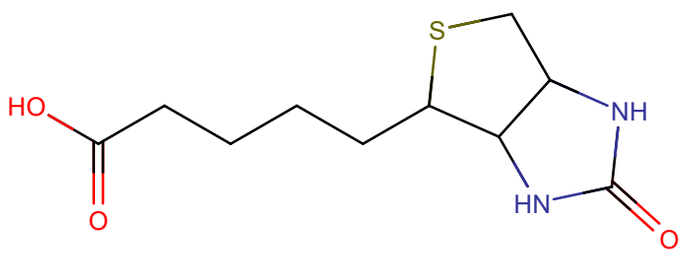
Molecular formula: $C_{10}H_{16}N_2O_3S$

MW: 244.31

Manufacturing date: 26.12.2025

Analysis date: 06.01.2026

Shelf life: 24 months



No.	Parameter	Specification	Results	Methods
1.	Appearance	Powder	Conforms	Visual
2.	Color	White	Conforms	Visual
3.	Identification	Conforms	Conforms	TLC&NMR
4.	Assay	97.5 % - 102.0 %	98.92 %	HPLC
5.	Clarity and color of solution	Solution clarity and the samples should be light in color standard	Conforms	Visual
6.	Loss on drying	≤0.2 %	0.03 %	USP <731>
7.	Residue on ignition	≤0.1 %	0.06 %	USP <281>
8.	Specific rotation	+89.0° to +93.0°	+90.18°	USP <781>
9.	Melting point	229.0 °C – 232.0 °C	231.0 °C – 231.4 °C	USP <741>

10.	Individual impurity	≤1.0 %	0.12 %	HPLC
11.	Total impurities	≤2.0 %	0.20 %	HPLC
12.	Heavy Metals	≤10 ppm	Conforms	ICP-MS
13.	Lead	≤2 ppm	Conforms	ICP-MS
14.	Arsenic	≤1 ppm	Conforms	ICP-MS
15.	TPC	$<10^3$ CFU/g	Conforms	USP <2021>
16.	TYMC	$<10^2$ CFU/g	Conforms	USP <2021>
17.	*Escherichia Coli*	Absent	Conforms	USP <2022>
18.	*Salmonella*	Absent	Conforms	USP <2022>

Storage: store in a cool and dry place, keep away from strong light and heat

Stability: 24 months when properly stored

Issued by
Nature Science Technologies Ltd.

Signature:



Date: 06.01.2026

This Certificate of Analysis is based on the manufacturer's quality control documentation for the referenced batch.