

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-12-17 10:02:49  
Date of Next Testing: 2025-12-16 10:02:49  
Product Name: **Betaine**  
CAS Number: 107-43-7  
Specifications & Purity: Moligand™, ≥98%  
Lot #: L2201604  
SKU #: **B105554**  
Version: **1**  
Analysis #: **157273**  
Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	11.5-12.5 (%)	11.82100 %
Carbon by Elemental Analysis	50.2-52.3 (%)	50.49800 %
Purity(Titration by HClO <sub>4</sub> )(calcd.on anh.substance)	97.5-102.5 (%)	98.97000 %
Heavy metals	0-0.001 (%)	0.00000 %
Water by Karl Fischer	0-2 (%)	0.20770 %
(As)Arsenic	0-0.0002 (%)	0.00000 %
Appearance (B105554)	White to Off-White Powder	White to Off-White Powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility,Colorless to faint yellow,clear(50 mg/mL, H <sub>2</sub> O)	pass	Pass



John Su  
QA & QC Manager