

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-11-01 09:05:59  
Date of Next Testing: 2025-10-31 09:05:59  
Product Name: **Betaine**  
CAS Number: 107-43-7  
Specifications & Purity: Moligand™, ≥98%  
Lot #: J2227034  
SKU #: **B105554**  
Version: **1**  
Analysis #: **141408**  
Storage Temperature: Store at 2-8°C, Argon charged

| Parameter  | Limit Values              | Result                    |
|--|---------------------------|---------------------------|
| Nitrogen by Elemental Analysis   | 11.5-12.5 (%)             | 11.84400 %                |
| Carbon by Elemental Analysis   | 50.2-52.3 (%)             | 50.46900 %                |
| Purity(Titration by HClO <sub>4</sub> )(calcd.on anh.substance)        | 97.5-102.5 (%)            | 99.21000 %                |
| Heavy metals   | 0-0.001 (%)               | 0.00000 %                 |
| Water by Karl Fischer  | 0-2 (%)                   | 0.97650 %                 |
| (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