

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-18 14:53:55

Date of Next Testing: 2026-08-17 14:53:55

Product Name: **Betaine**

CAS Number: 107-43-7

Specifications & Purity: Moligand™, ≥98%

Lot #: H2307652

SKU #: **B105554**

Version: **1**

Analysis #: **246322**

Storage Temperature: Store at 2-8°C, Argon charged

| Parameter                                                              | Limit Values              | Result                    |
|------------------------------------------------------------------------|---------------------------|---------------------------|
| Purity(Titration by HClO <sub>4</sub> )(calcd.on anh.substance)        | 97.5-102.5 (%)            | 99.71000 %                |
| Heavy metals                                                           | 0-0.001 (%)               | 0.00000 %                 |
| Water by Karl Fischer                                                  | 0-2 (%)                   | 0.77090 %                 |
| (As)Arsenic                                                            | 0-0.0002 (%)              | 0.00000 %                 |
| Nitrogen by Elemental Analysis                                         | 11.5-12.5 (%)             | 11.59200 %                |
| Carbon by Elemental Analysis                                           | 50.2-52.3 (%)             | 50.36000 %                |
| 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