

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-03-29 14:13:40

Date of Next Testing: 2027-03-28 14:13:40

Product Name: **Betaine Hydrochloride**

CAS Number: 590-46-5

Specifications & Purity:  $\geq 99\%$

Lot #: C2324330

SKU #: **B113358**

Version: **1**

Analysis #: **173852**

Storage Temperature: Room temperature

| Parameter                               | Limit Values             | Result                   |
|-----------------------------------------|--------------------------|--------------------------|
| Purity(Titration by AgNO <sub>3</sub> ) | 98.5-101.5 (%)           | 101.47000 %              |
| Ignition Residue(Ash)                   | 0-0.1 (%)                | 0.03200 %                |
| pH                                      | 0.8-1.2                  | 1.13700                  |
| Heavy metals                            | 0-0.001 (%)              | 0.00000 %                |
| (As)Arsenic                             | 0-2 (ppm)                | 0.00000 ppm              |
| Water content                           | 0-0.5 (%)                | 0.00000 %                |
| Appearance (B113358)                    | White Powder or Crystals | White Powder or Crystals |
| Clear colorless solution(50mg/ml,water) | pass                     | Pass                     |
| Infrared spectrum                       | Conforms to Structure    | Conforms to Structure    |



John Su  
QA & QC Manager