

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-09-18 11:30:11  
 Date of Next Testing: 2029-09-17 11:30:11  
 Product Name: **Sulfobetaine 12**  
 CAS Number: 14933-08-5  
 Specifications & Purity:  $\geq 98\%$   
 Lot #: I2512427  
 SKU #: **S105512**  
 Version: **2**  
 Analysis #: **563452**  
 Storage Temperature: Store at 2-8°C, Argon charged

| Parameter                      | Limit Values          | Result                |
|--------------------------------|-----------------------|-----------------------|
| Ignition Residue               | 0-0.1 (%)             | 0.01388 %             |
| Nitrogen by Elemental Analysis | 3.9-4.4 (%)           | 4.22000 %             |
| Zinc(Zn)                       | 0-5 (ppm)             | 0.00000 ppm           |
| Carbon by Elemental Analysis   | 59.4-61 (%)           | 60.89800 %            |
| Insoluble matter               | 0-0.1 (%)             | 0.00000 %             |
| Calcium(Ca)                    | 0-0.002 (%)           | 0.00000 %             |
| Copper(Cu)                     | 0-5 (ppm)             | 0.00000 ppm           |
| Potassium(K)                   | 0-50 (ppm)            | 14.00000 ppm          |
| Phosphate(PO <sub>4</sub> )    | 0-5 (ppm)             | 0.00000 ppm           |
| Chloride (Cl <sup>-</sup> )    | 0-0.05 (%)            | 0.00000 %             |
| Purity(HPLC)                   | 98-100 (%)            | 100.00000 %           |
| Iron(Fe)                       | 0-5 (ppm)             | 0.00000 ppm           |
| Hydrogen by Elemental Analysis | 10.7-11.3 (%)         | 10.87900 %            |
| Aluminum(Al)                   | 0-5 (ppm)             | 0.00000 ppm           |
| Magnesium(Mg)                  | 0-5 (ppm)             | 0.00000 ppm           |
| (Pb)Lead                       | 0-0.001 (%)           | 0.00000 %             |
| Ammonia (NH <sub>4</sub> )     | 0-500 (ppm)           | 0.00000 ppm           |
| Sodium(Na)                     | 0-50 (ppm)            | 16.00000 ppm          |
| Sulfur by Elemental Analysis   | 9.15-9.75 (%)         | 9.21000 %             |
| Appearance (S105512)           | White powder          | White powder          |
| Solubility in Water            | almost transparency   | almost transparency   |
| Infrared spectrum              | Conforms to Structure | Conforms to Structure |



QualityAssurance@aladdinsci.com

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A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager