

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-03-08 14:21:28  
 Date of Next Testing: 2027-03-07 14:21:28  
 Product Name: **Phosphocholine Chloride Calcium Salt Tetrahydrate**  
 CAS Number: 72556-74-2  
 Specifications & Purity:  $\geq 98\%$   
 Lot #: C2329621  
 SKU #: **C101915**  
 Version: **1**  
 Analysis #: **190985**  
 Storage Temperature: Protected from light, Store at  $-20^{\circ}\text{C}$

| Parameter                                                                        | Limit Values          | Result                |
|----------------------------------------------------------------------------------|-----------------------|-----------------------|
| Carbon by Elemental Analysis(anhydrous)                                          | 22.5-24.1 (%)         | 23.57000 %            |
| Calcium(Ca) anhydrous                                                            | 15-16 (%)             | 15.96000 %            |
| Nitrogen by Elemental Analysis (anhydrous)                                       | 5.1-5.7 (%)           | 5.57000 %             |
| Purity(Neutralization titration) (anhydrous)                                     | 97.5-102.5 (%)        | 97.51000 %            |
| Water by Karl Fischer                                                            | 21-24 (%)             | 21.11000 %            |
| Appearance (C101915)                                                             | white powder          | White powder          |
| Solubility,Clear to Hazy Colorless to Faint Yellow,100 mg/ml in H <sub>2</sub> O | Pass                  | Pass                  |
| Proton NMR spectrum                                                              | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager