

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-08-31 13:31:25  
 Date of Next Testing: 2026-08-21 13:31:25  
 Product Name: (Tri-n-butyl)-n-tetradecylphosphonium chloride  
 CAS Number: 81741-28-8  
 Specifications & Purity: ≥97%  
 Lot #: H2419579  
 SKU #: T121853  
 Version: 1  
 Analysis #: 396248  
 Storage Temperature: Room temperature, Argon charged

| Parameter                               | Limit Values                                 | Result                                       |
|-----------------------------------------|----------------------------------------------|----------------------------------------------|
| Purity(Titration by AgNO <sub>3</sub> ) | 96.5-103.5 (%)                               | 102.31000 %                                  |
| Appearance (T121853)                    | White to Off-White Powder or Solid or Chunks | White to Off-White Powder or Solid or Chunks |
| Proton NMR spectrum                     | Conforms to Structure                        | Conforms to Structure                        |
| Infrared spectrum                       | Conforms to Structure                        | Conforms to Structure                        |



John Su  
QA & QC Manager