

## Certificate of Analysis

Date of Testing: 2022-11-21 17:39:27  
Date of Next Testing: 2026-11-20 17:39:27  
Product Name: **L-O-Phosphoserine**  
CAS Number: 407-41-0  
Specifications & Purity: >98.0%(T)  
Lot #: K2217776  
SKU #: **S161191**  
**Analysis:** **128235**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(Neutralization titration)	98-100 (%)	99.54%
Specific Rotation [α] <sub>20</sub> /D(c=1 in 2M HCL)	15.4-16.7 (°)	16.61°
Appearance (S161191)	White to Off-White Powder	White to Off-White Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager