

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-09-17 17:35:18
 Date of Next Testing: 2024-09-16 17:35:18
 Product Name: **O-(4-Nitrophenylphosphoryl) choline**
 CAS Number: 21064-69-7
 Specifications & Purity: $\geq 98\%$
 Lot #: I2212152
 SKU #: **N131172**
 Version: **0**
 Analysis #: **106323**
 Storage Temperature: Store at -20°C, Argon charged

Parameter	Limit Values	Result
Water by Karl Fischer	0-6 (%)	5.98650 %
Nitrogen by Elemental Analysis (anhydrous)	8.9-9.5 (%)	8.91000 %
Purity(HPLC)	98-100 (%)	98.06400 %
Carbon by Elemental Analysis(anhydrous)	42.1-44.8 (%)	43.38000 %
Appearance (N131172)	white to off-white to light yellow solid	white to off-white to light yellow solid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility, light yellow clear solution(50 mg/ml, H ₂ O)	pass	Pass



John Su
QA & QC Manager