

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-12-03 16:43:49  
Date of Next Testing: 2026-12-02 16:43:49  
Product Name: **Choline chloride**  
CAS Number: 67-48-1  
Specifications & Purity: 99%  
Lot #: L2201771  
SKU #: **C108898**  
**Analysis:** **154047**  
Storage Temperature: Desiccated

Parameter	Limit Values	Result
Ammonia (NH <sub>4</sub> )	0-0.01 (%)	0.00 %
Loss on drying	0-1 (%)	0.34 %
Heavy metal (as Pb)	0-0.001 (%)	0.00 %
Purity(Titration by AgNO <sub>3</sub> )	98.5-101.5 (%)	100.92 %
Melting point	302-310 (°C)	309.35000 °C
Appearance (C108898)	White Powder or Crystals	White Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , 500 mg/ml in H <sub>2</sub> O	pass	Pass



John Su  
QA & QC Manager