

## Certificate of Analysis

Date of Testing: 2023-04-27 18:17:01  
Date of Next Testing: 2027-04-26 18:17:01  
Product Name: **Choline hydroxide solution**  
CAS Number: 123-41-1  
Specifications & Purity: 44 wt. % in H<sub>2</sub>O  
Lot #: D2325438  
SKU #: **C166651**  
**Analysis: 214045**  
Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

Parameter	Limit Values	Result
Purity(Titration by HClO <sub>4</sub> )	38-50 (%)	46.04 %
Appearance (C166651)	Colorless to tan liquid	Colorless to tan liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager