

Certificate of Analysis

Date of Testing: 2023-04-27 18:13:59
Date of Next Testing: 2027-04-26 18:13:59
Product Name: **Choline hydroxide solution**
CAS Number: 123-41-1
Specifications & Purity: 44 wt. % in H₂O
Lot #: D2325449
SKU #: **C166651**
Analysis: 214045
Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

| Parameter | Limit Values | Result |
|---|-------------------------|-------------------------|
| Purity(Titration by HClO ₄) | 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