

## Certificate of Analysis

Date of Testing: 2024-04-03 14:54:08  
Date of Next Testing: 2028-04-02 14:54:08  
Product Name: **Choline hydroxide solution**  
CAS Number: 123-41-1  
Specifications & Purity: 44 wt. % in H<sub>2</sub>O  
Lot #: C2429314  
SKU #: **C166651**  
**Analysis:** **329296**  
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 (%)               | 42.00 %                 |
| Appearance (C166651)                    | Colorless to tan liquid | Colorless to tan liquid |
| Proton NMR spectrum                     | Conforms to Structure   | Conforms to Structure   |



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QA & QC Manager