

## Certificate of Analysis

Date of Testing: 2024-09-21 17:08:30  
Date of Next Testing: 2028-09-20 17:08:30  
Product Name: **(3-Chloro-2-hydroxypropyl)trimethylammonium Chloride**  
CAS Number: 3327-22-8  
Specifications & Purity: 60 wt. % in H<sub>2</sub>O  
Lot #: I2414469  
SKU #: **C120679**  
Version: **2**  
Analysis #: **392974**

| Parameter                | Limit Values          | Result                |
|--------------------------|-----------------------|-----------------------|
| PH(5% in water,25°C)     | 4.8-6.4               | 5.21                  |
| Purity(Titration by HCl) | 58-70 (%)             | 69.95 %               |
| Water by Karl Fischer    | 30-40 (%)             | 30.46 %               |
| Appearance (C120679)     | Colorless liquid      | Colorless liquid      |
| Proton NMR spectrum      | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager