

## Certificate of Analysis

Date of Testing: 2024-10-11 15:24:21  
Date of Next Testing: 2026-10-11 15:24:21  
Product Name: **D-Mannosamine hydrochloride**  
CAS Number: 5505-63-5  
Specifications & Purity:  $\geq 98\%$   
Lot #: E1922131  
SKU #: **D130872**  
Version: **0**  
Analysis #: **417807**  
Storage Temperature: Store at 2-8°C, Argon charged

| Parameter  | Limit Values              | Result                    |
|--|---------------------------|---------------------------|
| Carbon by Elemental Analysis   | 32.7-34.1 (%)             | 33.87 %                   |
| Purity(HPLC)(mixture to Anomers)   | 98-100 (%)                | 99.20 %                   |
| Nitrogen by Elemental Analysis   | 6.2-6.8 (%)               | 6.32 %                    |
| Appearance (D130872)   | White to Off-White Powder | White to Off-White Powder |
| Proton NMR spectrum  | Conforms to Structure     | Conforms to Structure     |
| Solubility in H <sub>2</sub> O , Colorless to Faint Yellow Clear ,50 mg/mL, H <sub>2</sub> O | pass                      | Pass                      |



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