

## Certificate of Analysis

Date of Testing: 2023-04-16 15:54:31  
Date of Next Testing: 2027-04-15 15:54:31  
Product Name: **D(+)-Glucosamine hydrochloride**  
CAS Number: 66-84-2  
Specifications & Purity:  $\geq 99\%$   
Lot #: D2313764  
SKU #: **G100089**  
**Analysis: 064738**  
Storage Temperature: Desiccated

Parameter	Limit Values	Result
Loss on drying(105°C, 2 hrs)	0-0.1 (%)	0.03%
Specific Rotation $[\alpha]_{20}^D(c=1 \text{ in H}_2\text{O})(\text{after } 20\text{hours})$	70-74 (°)	70.84°
Purity (Argentometric Titration)	98.5-101.5 (%)	99.60%
Appearance (G100089)	White Solid	White Solid
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , clear colorless , 100mg/ml in water	pass	Pass



John Su  
QA & QC Manager