

CERTIFICATE OF ANALYSIS

Product: D-Glucosamine HCL

Mesh Size: 40 mesh

Batch No.: H202506038

Quantity: 1000 KGS

Manufacturing Date: Jun, 2025

Expiration Date: Jun, 2027

Test Item	Specifications	Result	Methods
Appearance	White crystalline powder	Complies	Visual
Assay	98.0%–102.0%	99.7%	USP38
Identification	A: Infrared absorption B: Chloride test C: Retention time	Complies	USP38 <197K> USP38 <191> HPLC
Specific rotation	Between +70.0° and +73.0°	+72.1°	USP38 <781S>
pH	Between 3.0 and 5.0	4.1	USP38 <791>
Loss on drying	≤1.0%	0.07%	USP38 <731>
Residue on ignition	≤0.1%	0.03%	USP38 <281>
Heavy metals	≤10 ppm	Complies	USP38 <231> Method II
Arsenic	≤3 ppm	Complies	USP38
Sulfate	≤0.24%	Complies	USP38
Total bacterial count	NMT 1000 cfu/g	Complies	USP38
Total combined molds and yeasts count	NMT 100 cfu/g	Complies	USP38

Technical Data Sheet

Salmonella species and Escherichia coli	Negative	Negative	USP38
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Conclusion: Pass