

Certificate of Analysis

Product Name: **D-Glucosamine HCL (Vegan)**
 Starting Material: **Corn/Maize Starch (Non-GMO)**
 Carrier: **None**
 Solvent: **Alcohol (≤5000 ppm)**
 Country of Origin: **China**
 Batch Number: **Varies**
 Manufacture Date: **Varies**
 Retest Date: **Varies**

Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
D-Glucosamine HCl (HPLC)	≥98%	99.98%
Aerobic Plate Count	≤1000 cfu/g	<10 cfu/g
Coliforms	≤100 cfu/g	<10 cfu/g
<i>E. Coli</i>	Negative	Absent
<i>Staph aureus</i>	Negative	Absent
Yeast & Mold	≤100 cfu/g	<10 cfu/g
<i>Salmonella</i>	Negative	Absent
<i>Pseudo. aeruginosa</i>	Negative	Absent
Conclusion (PureBulk):	This product conforms to standards	

The following information is an indirect translation of information provided from the Manufacturer's Certificate of Analysis, and should not be used solely as an instrument for strict quality control.

ITEMS	SPECIFICATIONS	RESULTS
Assay	98-102%	99.8%
Appearance	White to off-white crystalline powder	Conforms
Identification	Meets the requirements	Conforms
Specific Rotation	+70.0°~+73.0°	+72.2°
pH	3.0~5.0	4.2
Loss on Drying	≤1.0%	0.06%
Particle Size	95% pass through 40 mesh	Conforms
Residues on Ignition	≤0.1%	0.03%
Heavy Metals	≤10 ppm	Conforms
Lead (Pb)	≤3 ppm	Conforms
Arsenic (As)	≤3 ppm	Conforms
Cadmium (Cd)	≤1 ppm	Conforms
Mercury (Hg)	≤0.1 ppm	Conforms
Organic Volatile Impurities	Meets the requirements	Conforms
Solubility	Soluble in water but insoluble in ethanol	Conforms
Conclusion (Manufacturer):	This product conforms to USP40 standards	

Additional Information: Non-Allergen || BSE/TSE Free || Gluten-Free || Vegetarian

GMO Statement: Non-GMO

Composition: 100% D-Glucosamine HCL

Storage Conditions: **Keep in sealed container under 25°C.**

Keep away from strong light, heat and moisture.

Purebulk.Inc verifies that the information contained herein is true and correct to the best of our knowledge.

Verified By: Candace Gibson / Nicole Rammage

(This document was produced electronically and is valid without signature.)