

Certificate of Analysis

Product Name:	N-Acetyl D-Glucosamine
Extraction Solvent(s):	None
Country of Origin:	China
Batch Number:	Varies
Manufacture Date:	Varies
Retest Date:	Varies

Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
Acetyl-Glucosamine (HPLC)	≥98%	98.71%
Arsenic	≤1 ppm	<0.001 ppm
Cadmium	Report Only	0.002 ppm
Lead	≤10 ppm	0.015 ppm
Mercury	Report Only	0.014 ppm
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
Appearance	White crystalline powder	Conforms
Identification	Infrared Absorption	Conforms
	Specific Rotation	Conforms
	HPLC	Conforms
Residue on Ignition	≤0.1%	0.09%
Chloride (Cl)	≤0.1%	0.04%
Individual Impurity	≤0.5%	Negative
Total Impurity	≤2.0%	Negative
Limit of Glucosamine	≤1.0%	Negative
Specific Rotation $[\alpha]^{20}_D$	+39.0° - +43.0°	+42.04°
pH	6.0 - 8.0	6.74
Loss on Drying	≤0.5%	0.07%
Melting Range or Temperature	196°C-205°C	200.8°C-201.2°C
Conclusion (Manufacturer):	This product conforms to USP39 standards	

Additional Information:	Non-Allergen BSE/TSE Free Gluten-Free Vegan
GMO Statement	Non-GMO
Composition:	N-Acetyl D-Glucosamine 100%
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.)