



Certificate of Analysis

Product Name: **Chondroitin Sulfate**
 Starting Material: **Bovine Cartilage**
 Country of Origin: **China**
 Batch Number: **Varies**
 Manufacture Date: **Varies**
 Retest Date: **Varies**

Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
Chondroitin Sulfate (HPLC)	≥90.0%	99.74%
Loss on Drying (USP <731>)	≤12.0%	8.39%
Aerobic Plate Count	≤1000 cfu/g	<20 cfu/g
Coliforms	Report Only	<20 cfu/g
<i>E. Coli</i>	Negative	Absent
<i>Staph aureus</i>	Negative	Absent
Yeast & Mold	≤100 cfu/g	<20 cfu/g
Salmonella	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 to Off-white Free Flowing Powder	Conforms
Identification	A: Infrared Absorption	Conforms
	B: A solution containing 0.5g in 10 ml of water meets the requirements of sodium	Conforms
Clarity and Color of Solution	≤0.35 at 420nm	Conforms
Protein	≤6.0%	3.52%
Specific Rotation	-20°~ -30°	-25.02°
pH	5.5~7.5	6.85
Bulk Density	≥0.55 g/ml	0.60 g/ml
Particle Size	100% Through 80 Mesh	Conforms
Residue on Ignition	20%~30%	24.10%
Heavy Metals	≤10 ppm	<10 ppm
Lead (Pb)	≤3 mg/kg	0.07 mg/kg
Arsenic (As)	≤1 mg/kg	0.1 mg/kg
Cadmium (Cd)	≤1 mg/kg	<0.005 mg/kg
Mercury (Hg)	≤0.1 mg/kg	<0.003 mg/kg
Organic Volatile Impurities	Meets the Requirements	Conforms
Electrophoretic Purity	Meets the Requirements	Conforms
Conclusion (Manufacturer):	This product conforms to USP40 standards	

Additional Information: Allergen- Free || Melamine free || Gluten-Free || No Pesticides || BSE-TSE-Free || Non-Vegan/Vegetarian || Sewer Sludge Free

Composition statement: 100% Chondroitin sulfate, No carrier

Sterilization Information: Non-ETO || Non-Irradiation

GMO Statement: Non-GMO

Storage Conditions: **Keep in sealed container under
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 / Linda Heatley / Nicole Rammage

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