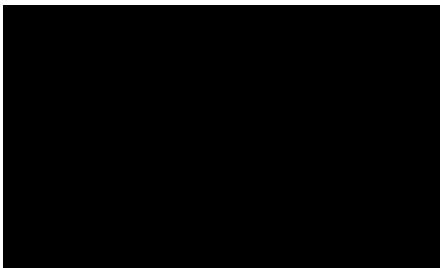




Advanced Botanical Consulting & Testing, Inc.

1169 Warner Ave. Tustin, CA 92780, Phone: (714) 259-0384 Fax: (714) 259-0385



Client Sample ID: Chondroitin Sulfate (Porcine)
Product #:
Lot#: 81700138/ 042619-02
Lab Number: 271386

Received Date: 07/03/2019

Report Date: 07/12/2019


Analyses

Results

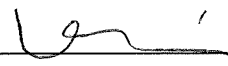
Chondroitin sulfate (EH-HPLC)	90.10% (as is basis)
Arsenic (As)	0.011 ppm
Cadmium (Cd)	0.004 ppm
Mercury (Hg)	0.002 ppm
Lead (Pb)	0.057 ppm

Method: ALC150A (JAOAC, 2007), ICP/MS

Analyzed by: _____


Chemist

Approved by: _____


Wendi Wang, PhD, President

Certificate of Analysis
*****Do Not Feed to Cattle or other Ruminants*****
Description: Chondroitin Sulfate Sodium 90% Dry Basis Porcine

Lot: 802181103

Customer: [REDACTED]

Ship Date: 04/22/2019

Customer PO: 41292

Customer Item: 81700138

General Properties	Specification	Test Method	Result ‡
Appearance	White to off-white powder	Visual	Complies
Odor	Characteristic	Aroma	Complies
Bulk density loose (gm/cc)	>= 0.48	Loose fill	0.63
Particle size thru # 14 (%)	= 100	Rotap 5 minutes	100
Particle size thru # 200 (%)	<= 60	Rotap 5 minutes	Complies

Analytical

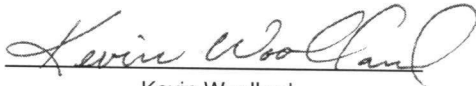
Assay Chondroitin Sulfate Sodium CPC (% Dry Basis)	>= 90.0	<= 105.0	USP curr. edit.	91.3
Assay Chondroitin Sulfate Sodium EHPLC (% Dry Basis)	>= 90.0		Enzymatic HPLC	Complies**
Identification A	Meets the requirements		USP curr. edit.	Complies**
Loss on drying (%)		<= 10	USP curr. edit.	9
pH	>= 5.5	<= 7.5	USP curr. edit.	6.2
Protein (%)		<= 6.0	USP curr. edit.	< 6.0
Specific rotation (deg)	>= -30.0	<= -20.0	USP curr. edit.	-26.1
ROI (%)	>= 20.0	<= 30.0	USP curr. edit.	23.8
Chloride (%)		<= 0.50	USP curr. edit.	< 0.5
Sulfate (%)		<= 0.24	USP curr. edit.	<0.24
Lead (ppm)		<= 0.5	ICP-MS	< 0.5
Arsenic (ppm)		<= 1.5	ICP-MS	< 1.5
Cadmium (ppm)		<= 0.5	ICP-MS	< 0.5
Mercury (ppm)		<= 0.2	ICP-MS	< 0.2
OVI	Meets the requirements		USP curr. edit.	Complies

Microbiological

APC (CFU/gm)		<= 1000	USP curr. edit.	< 1000
Yeast/mold (CFU/gm)		<= 100	USP curr. edit.	< 10
E. coli (10 gm)	Negative		USP curr. edit.	Negative
Salmonella (10 gm)	Negative		USP curr. edit.	Negative

Additional Information

Manufacture date 11/03/2018
 Expiration date 11/02/2020
 Storage condition Cool dry place sealed in light resistant container
 Manufactured by Haiyang Sanfeng Biochemical Co. Ltd
 Country of origin China

Approved By:


 Kevin Woollard
 Director of QA

Date: 04/25/2019

‡ Test results based on information supplied by the manufacturer, unless otherwise noted.

** Based on results from Pharmore's sampling plan.

The information contained in this certificate of analysis is believed to be accurate and is offered in good faith. Pharmore ingredients, however, cannot guarantee against natural product variations, patent infringement, liabilities or risk involved from the use of this product. Customer assumes all liability with the use of this product.

Sales Order: SO25832