

**Description:**

Chondroitin Sulfate Sodium 90% Porcine

**Lot #:**

802160709

	<u>Standard</u>	<u>Result</u> *
<b><u>Physical Properties</u></b>		
Appearance	White to off white powder	Complies
Odor	Characteristic	Complies
Bulk Density Loose (gm/cc)	>= 0.48	Complies
Particle size thru # 14 (%)	= 100	100
Particle size thru # 200 (%)	<= 60	Complies
<b><u>Analytical</u></b>		
ChondroitinSulfateSodium CPC Assay(Dry Basis,%)	>= 90.0 <= 105.0	91.3
ChondroitinSulfateSodium EHPLC Assay(Dry Basis,%)	>= 90.0	90.6**
Identification A (FTIR)	Meets the requirements	Complies***
Loss on drying (%)	<= 10	9.4
pH	>= 5.5 <= 7.5	6.2
Protein (%)	<= 6.0	<6.0
Specific rotation (deg)	>= -30.0 <= -20.0	-26.3
ROI (%)	>= 20.0 <= 30.0	22.6
Chloride (%)	<= 0.50	<0.5
Sulfate (%)	<= 0.24	<0.24
Lead (ppm)	<= 0.5	Complies***
Arsenic (ppm)	<= 1.5	Complies***
Cadmium (ppm)	<= 0.5	Complies***
Mercury (ppm)	<= 0.2	Complies***
OVI	Meets the requirements	Complies
<b><u>Microbiological</u></b>		
APC (CFU/gm)	<= 1000	<1000
Yeast/mold (CFU/gm)	<= 100	<10
E. coli (CFU/gm)	Negative	Complies
Salmonella (25 gm)	Negative	Complies
<b><u>Storage Conditions</u></b>		
Manufacture date		July 29, 2016
Expiration date		July 29, 2018
Storage		Cool dry place sealed in light resistant container
Manufactured by		Plant # 802
Country of origin		China
Revision #		Rev 2 12/30/2016

**Description:**

Chondroitin Sulfate Sodium 90% Porcine

**Lot #:**

802160709 - PO# 6025

**Standard****Result \***

Approved By: \_\_\_\_\_

Warren K. Majerus  
VP Quality Assurance

Date: 1/30/2017

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

\*\* Based on third party testing lab results.

\*\*\* Based on results from Pharmore's sampling protocol.

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



# Advanced Botanical Consulting & Testing, Inc.

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## Pharmore Ingredients, Inc.

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ATTN: Melissa Mack/ Customer Service  
PO#: 6085

Client Sample ID: Chondroitin Sulfate Sodium 90% Porcine  
Lot#: 802160709  
Lab Number: 180606

Received Date: 09/27/2016  
Report Date: 10/06/2016

### Analyses

### Results

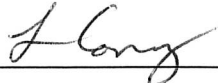
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Chondroitin Sulfate Sodium (EH-HPLC)	90.57 % (d.b.)
Di-saccharide-4-Sulfate	65.60 %
Di-saccharide-6-Sulfate	18.43 %
Di-saccharide-0-Sulfate	6.54 %
Moisture (LOD)	8.43 %


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Method: ALC150A (JAOAC, 2007), USP39/NF34

Analyzed by: \_\_\_\_\_

  
Chemist

Approved by: \_\_\_\_\_

  
Wendi Wang, PhD, President