

Description: Sodium Hyaluronate HA	Lot #: 3951610242X
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	<u>Standard</u>		<u>Result</u> *
<u>Physical Properties</u>			
Appearance	White powder		Complies
Bulk Density Loose (gm/cc)	>= 0.15	<= 0.3	0.3
Particle size thru # 80 (%)	>= 90		Complies***
<u>Analytical</u>			
Sodium Hyaluronate (Dry basis, %)	>= 93		95
Hyaluronic Acid (Dry basis, %)	>= 88		89
Glucuronic Acid (Dry basis, %)	>= 45		46
Loss on drying (%)		<= 8.0	7.4
pH	>= 6.0	<= 8.0	6.6
Protein (%)		<= 0.1	0.04
Molecular weight (kDA)	>= 1300	<= 1700	1460
Lead (ppm)		<= 0.5	<0.5
Arsenic (ppm)		<= 1.5	<1.5
Cadmium (ppm)		<= 0.5	<0.5
Mercury (ppm)		<= 0.2	<0.2
<u>Microbiological</u>			
APC (CFU/gm)		<= 1000	<100
Yeast/mold (CFU/gm)		<= 100	Complies
E. coli (CFU/gm)	Negative		Negative
Salmonella (25 gm)	Negative		Negative
<u>Storage Conditions</u>			
Manufacture date			Oct 24, 2016
Expiration date			Oct 24, 2019
Storage			Cool dry place sealed in light resistant container
Manufactured by			Plant # 395
Country of origin			China
Revision #			Rev 9 10/26/2016

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Standard

Result *

Approved By:  Date: 3/1/2017
Warren K. Majerus
VP Quality Assurance

* 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.



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ATTN: Melissa Mack
PO#: 6191

Client Sample ID: Sodium HA
Lot#: 3951610242X
Lab Number: 190697

Received Date: 02/06/2017
Report Date: 02/27/2017

Analyses

Results

Glucuronic acid (UV-Vis)

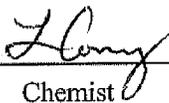
45.05 % (d.b.)

Loss on drying (LOD)

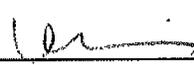
4.63 %

Method: European Pharmacopeia, USP<731>

Analyzed by: _____


Chemist

Approved by: _____


Wendi Wang, PhD, President