



lot # 021517-09

Certificate Of Analysis

Customer:
The Garmon Corporation

PO #: 38468
Customer Part #: 81700138
Ship Date: 2/13/17
Shipment #: 0000007760

**** Do Not Feed to Cattle or Other Ruminants ****

Description:

Chondroitin Sulfate Sodium 90% Porcine

Lot #:

802161207

	<u>Standard</u>	<u>Result</u> *
<u>Physical Properties</u>		
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
<u>Analytical</u>		
Chondroitin Sulfate Sodium CPC Assay (Dry Basis, %)	>= 90.0 <= 105.0	94.5
Chondroitin Sulfate Sodium EHPLC Assay (Dry Basis, %)	>= 90.0	Complies***
Identification A (FTIR)	Meets the requirements	Complies***
Loss on drying (%)	<= 10	9.5
pH	>= 5.5 <= 7.5	6.3
Protein (%)	<= 6.0	<6.0
Specific rotation (deg)	>= -30.0 <= -20.0	-22.5
ROI (%)	>= 20.0 <= 30.0	27.3
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
<u>Microbiological</u>		
APC (CFU/gm)	<= 1000	<1000
Yeast/mold (CFU/gm)	<= 100	<10
E. coli (CFU/gm)	Negative	< Negative
Salmonella (25 gm)	Negative	Negative
<u>Storage Conditions</u>		
Manufacture date		Dec 13, 2016
Expiration date		Dec 13, 2018
Storage		Cool dry place sealed in light resistant container
Manufactured by		Plant # 802
Country of origin		China
Revision #		Rev 2 12/30/2016