

Lot# 021517-10



Certificate Of Analysis

Customer:
The Garmon Corporation

PO #: 38468
Customer Part #: 81700149
Ship Date: 2/13/17
Shipment #: 0000007760

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

Description:
Glucosamine HCl Powder

Lot #:
513Y1611053

Physical Properties

Standard

Result *

Appearance	White free flowing powder	Complies
Bulk Density Loose (gm/cc)	>= 0.60 <= 0.90	0.63
Particle size thru # 20 (%)	>= 95	Complies
Analytical		
Assay (Glucosamine HCl, Dry Basis, %)	>= 98.0 <= 102.0	99.9
Identification A	Meets the requirements	Complies
Identification B	Meets the requirements	Complies
Identification C	Meets the requirements	Complies
Loss on drying (%)	<= 1.0	0.1
pH	>= 3.0 <= 5.0	4.4
Specific rotation (deg)	>= +70.0 <= +73.0	+71.8
ROI (%)	<= 0.1	0.1
Sulfate (%)	<= 0.24	Complies
Lead (ppm)	<= 0.5	<0.5
Arsenic (ppm)	<= 1.5	<0.5
Cadmium (ppm)	<= 0.5	<0.5
Mercury (ppm)	<= 0.2	<0.1

Microbiological

APC (CFU/gm)	<= 1000	Complies
Yeast/mold (CFU/gm)	<= 100	Complies
E. coli (CFU/gm)	Negative	Complies
Salmonella (25 gm)	Negative	Complies

Storage Conditions

Manufacture date	Nov 21, 2016
Expiration date	Nov 21, 2019
Storage	Cool dry place sealed in light resistant container
Manufactured by	Plant # 513
Country of origin	China
Revision #	Rev 7 7/25/2016

Warren K. Majerus

Approved By:

Warren K. Majerus

Date: 2/13/2017