

Certificate of Analysis

PRODUCT: CHONDROITIN SULFATE 90% (BOVINE)

Item Number: CH5091

Lot Number: 20160904

Manufacture Date: September 4, 2016

Expiration Date: September 3, 2018

<u>TEST</u>	<u>SPECIFICATION</u>	<u>RESULT</u>	<u>METHOD</u>
Appearance:	Free Flowing Powder	Free Flowing Powder	USP 29
Color:	White - Off White	White	USP 29
Assay (by CPC):	NLT 90.0% (dried basis)	93.70%	USP 29/CPC Titration
(by Enzymatic HPLC):	NLT 76.0% (as is basis)	85.80%	Enzymatic HPLC
Specific Rotation:	- 20.0° ~ - 30.0°	(-) 25.2°	USP 29
pH:	5.5 - 7.5	6.00	USP 29
Loss on Drying:	NMT 10.0%	9.10%	USP 29
Residue on Ignition:	20% - 30% (dried basis)	24.30%	USP 29
Heavy Metals:	NMT 20ppm	LT 20ppm	USP 29
Protein:	NMT 6.0%	LT 6.0%	USP 29
Chloride:	NMT 0.50%	LT 0.50%	USP 29
Sulfate:	NMT 0.24%	LT 0.24%	USP 29
Microbiological			
Total Plate Count:	NMT 3,000 CFU/g	LT 10 CFU/g	USP 29
Yeast & Mold:	NMT 100 CFU/g	LT 10 CFU/g	USP 29
Salmonella:	Negative	Negative	USP 29
E. Coli.:	Negative	Negative	USP 29

Packaging: 25kg fiber drums with double poly liners.

Storage & Handling: Store tightly sealed in a cool, dry location away from direct sunlight.

Country of Origin: China

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Sterilization: Non-Irradiated