

Certificate of Analysis

PRODUCT: CHONDROITIN SULFATE 90% (PORCINE)

Item Number: CH4090

Lot Number: 20161008

Manufacture Date: October 8, 2016

Expiration Date: October 7, 2018

<u>TEST</u>	<u>SPECIFICATION</u>	<u>RESULT</u>	<u>METHOD</u>
Appearance:	Free Flowing Powder	Free Flowing Powder	Visual
Color:	Creamy White	Creamy White	Visual
Odor:	Characteristic	Characteristic	Organoleptic
Assay (by CPC):	NLT 90.0% (dried basis)	92.00%	CPC Titration
(by Enzymatic HPLC):	NLT 72.0% (as is basis)	80.90%	Enzymatic HPLC
pH:	5.5 - 7.5	5.8	USP 791
Loss on Drying:	NMT 10.0%	9.10%	USP 731
Residue on Ignition:	20% - 30% (dried basis)	23.60%	USP 281
Specific Rotation:	- 20.0° ~ - 30.0°	- 26.5°	USP 781S
Heavy Metals:	NMT 20ppm	LT 20ppm	USP 231
Protein:	NMT 6.0%	LT 6.0%	USP
Residual Solvents:	NMT 0.5% (Ethanol)	LT 0.5%	USP
Chloride:	NMT 0.50%	LT 0.5%	USP 221
Microbiological			
Total Plate Count:	NMT 3000 CFU/g	14 CFU/g	USP 2021
Yeast & Mold:	NMT 300 CFU/g	LT 10 CFU/g	USP 2021
Salmonella:	Negative	Negative	USP 2021
E. Coli.:	Negative	Negative	USP 2021
Staphylococcus:	Negative	Negative	USP 2021

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

Country of Manufacture: China

Sterilization: Non-Irradiated

