

ALADDIN SCIENTIFIC CORPORATION  
 14078 Meridian Parkway, Riverside, CA. 92518

### Certificate of Analysis

Date of Testing: 2026-04-24 16:24:05  
 Date of Next Testing: 2029-04-23 16:24:05  
 Product Name: **Chondroitin sulfate sodium (from Porcine Cartilage)**  
 CAS Number: 9082-07-9  
 Specifications & Purity: ≥90%  
 Lot #: D2623829  
 SKU #: **C774029**  
 Version: **1**  
 Analysis #: **489435**  
 Storage Temperature: Store at 2-8°C, Protected from light, Argon charged, Desiccated

Parameter	Limit Values	Result
Specific Rotation [α] <sub>20</sub> /D(c=3 in H <sub>2</sub> O)	-30~-20 (°)	-25.50000 °
Purity(HPLC)	90-100 (%)	90.60000 %
PH(1% in H <sub>2</sub> O)	5.5-7.5	6.70000
Loss on drying	0-10 (%)	8.30000 %
Protein	0-3.5 (%)	3.00000 %
Residue on Ignition	20-30 (%)	24.40000 %
Sulfur(S)	5.5-7.5 (%)	6.90000 %
Heavy metals	0-20 (ppm)	10.00000 ppm
Nitrogen by Elemental Analysis	2.5-3.5 (%)	2.70000 %
Chloride (Cl <sup>-</sup> )	0-0.5 (%)	0.40000 %
Arsenic(As)	0-2 (ppm)	1.00000 ppm
Total Plate Count	0-1000(CFU/g)	1000.00000 cfu/g
Yeast and Mold	0-100 (CFU/g)	100.00000 cfu/g
Cadmium(Cd)	0-1.5 (ppm)	1.34000 ppm
Lead(Pb)	0-5 (ppm)	4.33000 ppm
Mercury(Hg)	0-5 (ppm)	4.33000 ppm
Residual solvents	0-0.5 (%)	0.20000 %
Sulfate(SO <sub>4</sub> <sup>2-</sup> )	0-0.24 (%)	0.24000 %
Sodium(Na)	0-7 (%)	7.00000 %
Appearance(C774029)	Fine white powder	Fine white powder
E.coli	Negative	Negative
Salmonella	negative	Negative
Identification NIR/USP	Complied	Complied
Chondroitin A to C Ratio:1:5	Pass	Pass
Staphylococcus Aureus	Negative	Negative

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**Parameter**

Solubility(1% H<sub>2</sub>O),Clear Solution

**Limit Values**

Pass

**Result**

Pass

A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager