

山东广昊生物制品有限公司
SHANDONG GUANGHAO BIOLOGICAL PRODUCTS CO., LTD

CERTIFICATE OF ANALYSIS

Product: Chondroitin Sulfate

Batch No.: GH-B20260420

Test Method: USP 41 standard

Quantity: 500KG

Report Date: 23 Apr., 2026

Manufacture Date: 20 Apr., 2026

Expiry Date: 19 Apr., 2029

Package: 25kg/drum

ITEMS	STANDARD	RESULTS
Appearance	Off-white Free Flowing powder	PASS
Identification	A: Infrared Absorption	PASS
	B: A solution containing 0.5g in 10 ml of water meets the requirements of Sodium	
Limit of Nonspecific Disaccharides	NMT10.0%	Complied
Clarity and Color of Solution	0.35 Max at 420nm	PASS
Chondroitin Sulfate Assay (CPC)	≥90% (on dry basis)	91.00%
Chondroitin Sulfate Assay (HPLC)	≥90% (on dry basis)	90.40%
Loss On Drying	12% Max	10.90%
Protein	6.0% Max	5.20%
Specific Rotation	-20° ---- -30°	-27.00°
PH	5.5---7.5	6.40
Bulk Density	0.60g/ml Min	0.73g/ml
Particle Size	80 mesh	PASS
Chloride	0.50% max	Complied
Sulfate	0.24% max	Complied
Residue On Ignition	20%-----30%	21.50%
Heavy Metals	20PPM Max	PASS
Lead	3PPM Max	PASS
Arsenic	1PPM Max	PASS
Mercury	0.1PPM Max	PASS
Cadmium	1PPM Max	PASS
Residual solvents	Meets the Requirements	PASS
Electrophoretic purity	Meets the Requirements	PASS
Total Plate Count	1,000cfu/g Max	PASS
Yeast & Mold	100cfu/g Max	PASS
E.Coli	NEGATIVE	NEGATIVE
Salmonella	NEGATIVE	NEGATIVE

CONCLUSION: CONFORMS TO USP41 REQUIREMENTS

INSPECTOR: Lina

QC MANAGER: Lijie

