

BaseBulk

CERTIFICATE OF ANALYSIS

Product Name	Chondroitin Sulfate Bovine
Batch Number	HS2404194
Quantity	2000 kg
Packing	25 kg/drum
Country of Origin	China
Manufacture Date	2024-04-11
Expiry Date	2028-04-10
Analysis Date	2024-04-18

Physical & Chemical Characteristics

Analysis Item	Specification	Result
Appearance	Off white to cream powder	Off white to cream powder
Identification	Meet the requirements	Meet the requirements
Assay	≥90.0%	91.1%
Loss on drying (105°C, 4 h)	≤10.0%	8.8%
Residue on ignition (on dried basis)	20.0–30.0%	24.1%
Specific rotation	-20° to -30°	-21.9°
pH	5.5–7.5	6.5
Protein	≤6.0%	4.5%
Electrophoretic purity	≤2%	<2%
Bulk Density	≥0.48 g/ml	0.55 g/ml
Tapped Density	≥0.70 g/ml	0.86 g/ml
Particle Size	100% through 60 mesh	100% through 60 mesh

Heavy Metals

Analysis Item	Specification	Result
Heavy Metals (total)	≤20 ppm	<20 ppm
Arsenic (As)	≤1.5 ppm	<1.5 ppm

Lead (Pb)	≤0.5 ppm	<0.5 ppm
Cadmium (Cd)	≤0.5 ppm	<0.5 ppm
Mercury (Hg)	≤1.5 ppm	<1.5 ppm

Microbiological Tests

Analysis Item	Specification	Result
Total Plate Count	≤1000 cfu/g	<1000 cfu/g
Yeasts & Molds	≤100 cfu/g	<100 cfu/g
E. coli	Negative/g	Negative/g
Salmonella	Negative/10 g	Negative/10 g
Staphylococcus	Negative/g	Negative/g

Conclusion

Analysis Item	Specification	Result
Conclusion	Comply with current USP standards	Complies