



HANGZHOU SARTORT BIOPHARMA CO., LTD

CERTIFICATE OF ANALYSIS

Product Name: Hyaluronic acid Cosmetic Grade		
Molecular formula: C ₁₄ H ₂₂ NNaO ₁₁	CAS No.: 9067-32-7	
Quantity: 150.8kg	Batch No.: ST-200925	
Manufacturing date: 2021-09-25	Exp. date: 2021-09-24	
Item	Specification	Results
Appearance	White or almost white powder or granule	Conforms
Glucuronic acid	≥45.0%	46.5%
Sodium hyaluronate	≥93.0%	96.2%
Bulk density , g/cm³	0.1~0.6	0.3
PH (0.5%aq.sol.,25℃)	5.0-8.5	7.3
Absorbance (0.5%aq.sol.,25℃)	A _{280nm} ≤0.25	0.23
Transmittance (0.5%aq.sol.,25℃)	T _{550nm} ≥99.0%	100%
Limiting Viscosity	0.47 - 2.86 dL/g	1.61 dL/g
Loss on drying	≤10.0%	8.2%
Molecular weight	10- 100 kDa	50.8 kDa
Intrinsic viscosity	Measured value	20.4dL/g
Kinematic viscosity	Measured value	40.7mm ² /s
Protein	≤0.1%	<0.01%
Heavy metal(as Pb)	≤20ppm	<10ppm
Bacterial Endotoxin	<0.5EU/mg	<0.5EU/mg
Bacteria Count	≤100EU/mg	Conforms
Arsenic,ppm	≤ 2ppm	<2ppm
Bacteria counts	≤100CFU/g	Conforms
Molds & Yeasts	≤50CFU/g	Conforms
Staphylococcus Aureus	Negative	Negative

Pseudomonas Aeruginosa	Negative	Negative
Escherichia coli	Negative	Negative
Conclusion	The batch is in compliance with Q/FCG 4.1.111-2017 Standards.	

QC: *May Lin*

QA: *Cathy Shen*

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