



Certificate of Analysis

Name	Hyaluronic Acid	Grade	Cosmetic Grade
M.W.	3-7K Da	Test Method	GB/T 4416-2012
Lot No.	202107031	Report Date	2021/07/04
MFG Date	2021/07/03	EXP Date	2023/07/02

	Test Items	Specification	Results
1	Appearance	White or almost white powder or granules	Complies
2	Infrared absorption	Positive	Complies
3	Reaction of sodium	Positive	Complies
4	Absorbance	≤ 0.25	0.10
5	Transparency	$\geq 99.0\%$	100.0%
6	Ph	6.0~7.5	6.1
7	Intrinsic viscosity	$\leq 0.47\text{dL/g}$	0.24dL/g
8	Molecular weight	$\leq 10,000\text{Da}$	4243Da
9	Kinematic viscosity	Actual value	1.11mm ² /s

Purity Test

10	Loss on drying	$\leq 10\%$	9.47%
11	Residue on ignition	$\leq 20\%$	18.94%
12	Heavy metals	$\leq 20\text{ppm}$	<20ppm
13	Arsenic	$\leq 2\text{ppm}$	<2ppm
14	Protein	$\leq 0.05\%$	0.02%
15	Assay	$\geq 95.0\%$	97.0%
16	Glucuronic acid	$\geq 46.0\%$	46.9%

Microbiological Test

17	Total bacterial count	$\leq 100\text{CFU/g}$	<10CFU/g
18	Yeasts & mold	$\leq 20\text{CFU/g}$	<10CFU/g
19	E. coli	Negative	Negative
20	Staph	Negative	Negative
21	Pseudomonas aeruginosa	Negative	Negative

Conclusion: The results meet the requirements of the specifications.