



Certificate of Analysis

Name	Hyaluronic Acid	Grade	Cosmetic Grade
M.W.	0.8-1.2MDa	Test Method	GB/T 4416-2012
Lot No.	202105173	Report Date	2021/05/18
MFG Date	2021/05/17	EXP Date	2023/5/16

	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	0.07
5	Transparency	$\geq 99.0\%$	99.8%
6	Ph	6.0~7.5	6.4
7	Intrinsic viscosity	(13.77~23.64)dL/g	17.36dL/g
8	Molecular weight	(0.75~1.50) $\times 10^6$ Da	1.01 $\times 10^6$ Da
9	Kinematic viscosity	Actual value	29.22mm ² /s

Purity Test

10	Loss on drying	$\leq 10\%$	9.78%
11	Residue on ignition	$\leq 20\%$	18.85%
12	Heavy metals	≤ 20 ppm	<20ppm
13	Arsenic	≤ 2 ppm	<2ppm
14	Protein	$\leq 0.1\%$	0.06%
15	Assay	$\geq 95.0\%$	96.6%
16	Glucuronic acid	$\geq 46.0\%$	46.7%

Microbiological Test

17	Total bacterial count	≤ 100 CFU/g	<10CFU/g
18	Yeasts & mold	≤ 20 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.