



CERTIFICATE OF ANALYSIS

<b>Product Name</b>	Sodium Hyaluronate	<b>Batch No.</b>	JL20231029
<b>Cas</b>	9067-32-7	<b>MF Date</b>	OCT.10,2023
<b>Packing</b>	1kg/bag	<b>Analysis Date</b>	OCT.10,2023
<b>Grade</b>	Cosmetic grade	<b>Expiry Date</b>	OCT.09,2026
<b>Item</b>	<b>Standard</b>	<b>Result</b>	
<b>Appearance</b>	White powder or granules	Complied	
<b>Infrared Absorption</b>	The infrared absorption spectrum should be consistent with the control spectrum	Complied	
<b>Sodium salt identification reaction</b>	Should show the positive reaction of sodium salt	Complied	
<b>Glucuronic acid content(%)</b>	≥45.0	46.97	
<b>Sodium hyaluronate content(%)</b>	≥95.0	97.1	
<b>Average molecular weight(KDa)</b>	(1.6-1.8)*10 <sup>6</sup> Dalton	1.6327*10 <sup>6</sup> Dalton	
<b>Absorbance</b>	≤0.25	0.067	
<b>Transparency(%)</b>	≥99.0	100	
<b>Intrinsic viscosity value(dL/g)</b>	24.86-27.25	25.26	
<b>Dry weight loss(%)</b>	≤10.0	7.55	
<b>PH</b>	5.0-8.5	6.27	
<b>Bulk density(g/cm<sup>3</sup>)</b>	Measured values	0.265	
<b>Tap density(g/cm<sup>3</sup>)</b>	Measured values	0.377	
<b>Pb(Pb, mg/kg)</b>	≤2	<2	
<b>As(As, mg/kg)</b>	≤1	<1	



# Unilong Industry Co., Ltd

Add: No.2000 Shunhua Rd, High-Tech Zone , Jinan City, Shandong Province, China

<b>Hg(Hg, mg/kg)</b>	$\leq 0.5$	<0.5
<b>Cd(Cd, mg/kg)</b>	$\leq 0.5$	<0.5
<b>Heavy metal(in lead, mg/kg)</b>	$\leq 10$	<10
<b>Protein content(%)</b>	$\leq 0.10$	0.047
<b>Total Colony Number(CFU/g)</b>	$\leq 100$	<10
<b>Fungi and yeasts(CFU/g)</b>	$\leq 50$	<10
<b>Escherichia Coli /g</b>	Negative	Negative
<b>Coliforms /g</b>	Negative	Negative
<b>Staphylococcus Aureus</b>	Negative	Negative
<b>Pseudomonas Aeruginosas</b>	Negative	Negative
<b>Conclusion</b>	Qualified	

**Analyst: Wen Qian**

**Quality Assurance Officer: Zhan Peng**