

**CERTIFICATE OF ANALYSIS**      **19-E051713**

Product Name: Low Molecular Weight Sodium Hyaluronate    Standard: SF/JS ZL-001-19  
(HA-TLM)

Batch No.: 1905096

Production Date: May 09, 2019

Quantity: 185.958 kg

Expiry Date: May 09, 2022

<b>Item</b>	<b>Standard</b>	<b>Result</b>
1. Characters	White or almost white powder or granules	Complied
2. Identification		
A. Infrared absorption	Consistent with the <i>reference spectrum</i> <i>of sodium hyaluronate</i>	Complied
B. Reaction of sodium	Positive	Complied
3. pH	6.0~7.5	6.4
4. Transparency	≥99.0%	99.6%
5. Loss on drying	≤10.0%	6.7%
6. Limiting viscosity	<17.3 dl/g	16.9 dl/g
7. Molecular weight	<1.00MDa	0.98MDa
8. Protein	≤0.05%	0.022%
9. Heavy metals	≤20ppm	<20ppm
10. Glucuronic acid	≥46.0%	47.1%
11. Sodium hyaluronate	≥95.0%	97.3%
12. Bacteria counts	<10 cfu/g	Complied
13. Mold & Yeast	<10 cfu/g	Complied
14. <i>Staphylococcus aureus</i>	Negative	Negative
15. <i>Pseudomonas aeruginosa</i>	Negative	Negative

Approved by:  2019.05.17