

## Certificate of Analysis

<b>Product Name:</b>	Sodium Hyaluronate	<b>Grade:</b>	HAC-L-SC
<b>Standard:</b>	Ph. Eur. 7.0	<b>Batch No.:</b>	20171106
<b>Origin:</b>	Fermentation from streptococci	<b>Manufacturing Date:</b>	17-Nov-17
<b>Analysis Date:</b>	17-Nov-17	<b>Retest date:</b>	16-Nov-19

Items	Specifications	Result
Appearance	White or almost white powder or fibrous aggregate	Wither powder
Identification	Infrared absorption	Consistent with the Ph. Eur. Reference spectrum of sodium hyaluronate
	Reaction of Sodium	Positive
Assay (HPLC)	95.0 -105.0% (dried substance)	96.0%
Loss on drying	≤ 15.0%	7.0%
Appearance of solution	Clear	Clear
Absorbance at 600nm (0.33% solution, dried substances)	A <sub>600nm</sub> ≤ 0.01	Complies
pH(0.5% in water, dried substance)	5.0 ~ 8.5	6.3
Molecular Weight (in-house)	10K - 1,000K Da	200K Da
Nucleic acids Absorbance at 260nm (0.33% solution, dried)	A <sub>260nm</sub> ≤ 0.5	Complies
Protein	≤ 0.1%	0.030%
Chlorides	≤ 0.5%	Complies
Iron (2.2.23, Method II)	≤ 30 ppm	Complies
Heavy metals	≤ 20ppm	Complies
Microbial contamination (TAMC)	≤ 100 cfu/g	Complies
Microbial contamination (TYMC)	≤ 100 cfu/g	Complies
Residual Solvents (in-house)	Ethanol ≤ 5000 ppm	Complies
Application	Cosmetic Grade	
	Skin care, makeup, cleansing, hair care etc.	

Storage: Kept airtightly, protected from light, heat.  
Packaging: 50g /glass bottle, 100g /glass bottle, 200g /glass bottle.  
Shelf life: 24 months

**Stanford Chemicals Company**

By: 