

# HaoSail

## QINGDAO HAOSAIL SCIENCE CO.,LTD

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### CERTIFICATE OF ANALYSIS

Product Name	Hyaluronic acid HW
Batch Number	HS HA 2020081423
Lot Quantity	20KG
MFG.Date	AUG.05.2020
EXP.Date	AUG.04.2022
Country of Origin	China

Items of Analysis	Specification	Results
<b>Apparance</b>	White or almost white powder or granule	Conform
Glucuronic acid	≥44.5%	47.1 %
Sodium Hyaluronate	≥92.0%	97.40%
PH	5.0~8.5	6.8
Transparency	≥99.0%	99.80%
Molecular weight, Da	As per request	1500KDa
Intrinsic Viscosity	Measured value	23.6dL/g
Protein	≤0.10%	0.05%
Bulk density	Measured value	0.22g/cm <sup>3</sup>
Tap density	Measured value	0.37g/cm <sup>3</sup>
Residue on ignition	≤20.0%	13.00%
Loss on drying	≤10.0%	6.00%
Heavy metals (Pb)	≤20ppm	<10ppm
Bacteria count	≤100cfu/g	Conform
Mold and yeast	≤50cfu/g	Negative
Pseudomonas aeruginosa	Negative	Negative

For and on behalf of  
QINGDAO HAOSAIL SCIENCE CO.,LTD  
青岛浩赛生物科技有限公司

*[Signature]*  
Authorized Signature(s)

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