

## QINGDAO HAOSAIL SCIENCE CO.,LTD

B3, 17# Songyuan Road, Qingdao High-Tech Zone, 266109, China

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### CERTIFICATE OF ANALYSIS

Product Name	Hyaluronic acid LW
Batch Number	HS HA 2020092326
Lot Quantity	30KG
MFG.Date	Sep.09.2021
EXP.Date	Sep.08.2024
Country of Origin	China

Items of Analysis	Specification	Results
<b>Appearance</b>	White or almost white powder or granule	Conform
Glucuronic acid	$\geq 44.5\%$	46.1 %
Sodium Hyaluronate	$\geq 92.0\%$	95.30%
PH	5.0~8.5	6.4
Transparency	$\geq 99.0\%$	99.90%
Molecular weight,Da	As per request	500KDa
Intrinsic Viscosity	Measured value	10.0dL/g
Protein	$\leq 0.10\%$	0.03%
Bulk	Measured value	0.34g/cm3
Tap	Measured value	0.47g/cm3
Residue on ignition	$\leq 20.0\%$	12.80%
Loss on drying	$\leq 10.0\%$	6.70%
Heavy metals (Pb)	$\leq 20\text{ppm}$	$< 10\text{ppm}$
Bacteria count	$\leq 100\text{cfu/g}$	Conform
Mold and yeast	$\leq 50\text{cfu/g}$	Conform
Pseudomonas aeruginosa	Negative	Negative

For and on behalf of  
QINGDAO HAOSAIL SCIENCE CO.,LTD  
青岛浩塞生物科技有限公司  
Authorized Signature(s)

Conclusion

This batch of product conforms to the Specification.

Storage

Store in cool, dry place and away from strong light and heat