

HaoSail

QINGDAO HAOSAIL SCIENCE CO.,LTD

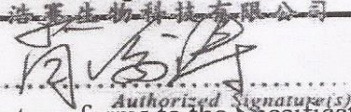
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CERTIFICATE OF ANALYSIS

Product Name	Hyaluronic acid HW
Batch Number	HS HA 2020091017
Lot Quantity	40KG
MFG.Date	AUG.28.2020
EXP.Date	AUG.27.2022
Country of Origin	China

Items of Analysis	Specification	Results
Apparance	White or almost white powder or granule	Conform
Glucuronic acid	$\geq 44.5\%$	47.1 %
Sodium Hyaluronate	$\geq 92.0\%$	97.30%
PH	5.0~8.5	6.5
Transparency	$\geq 99.0\%$	99.90%
Molecular weight, Da	As per request	1500KDa
Intrinsic Viscosity	Measured value	23.6dL/g
Protein	$\leq 0.10\%$	0.04%
Bulk density	Measured value	0.28g/cm ³
Tap density	Measured value	0.39g/cm ³
Residue on ignition	$\leq 20.0\%$	13.00%
Loss on drying	$\leq 10.0\%$	7.00%
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	

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


Authorized Signature(s)

Conclusion
Storage

This batch of product conforms to the Specification.
Store in cool, dry place and away from strong light and heat

APPROBADO

FVA. P-03

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