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## CERTIFICATE OF ANALYSIS

<b>Product Name:</b>	Chitosan	<b>Quantity:</b>	5Kg
<b>Grade:</b>	Medical, Pharmaceutical	<b>Manufacture Date:</b>	December 28, 2018
<b>Source Material:</b>	<i>Chionoecetes opilio</i> - Snow Crab	<b>Testing Date:</b>	January 2, 2019
<b>CAS:</b>	9012-76-4	<b>Lot No.:</b>	281219
<b>Storage Conditions:</b>	<25°C, cool dry environment, well-sealed	<b>Shelf-Life:</b>	36 months

Test Item	Specification	Results
Appearance	Off-white powder	Conform
Deacetylation (%)	≥85 - 90	88.3
Particle size (mesh)	80	Conform
Viscosity (mpa.s, 20°C)	<200	70
pH	6.5-8.5	Conform
Moisture content (%)	≤10.0	7.10
Ash content (%)	≤1.0	0.80
Insoluble in acetic (%)	≤1.0	0.10
Heavy metals (ppm)	≤10.0	Conform
As - Arsenic (ppm)	≤1.0	Conform
Pb - Lead (ppm)	≤2.0	Conform
Total plate count (cfu/g)	≤1000	120

Date: January 2, 2019  
Testing Supervisor: Rachel Shao Brown -  
Director of QA/QC

Signed: \_\_\_\_\_

