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CERTIFICATE OF ANALYSIS

(Post Plasma-Treatment)

Product Name: Chitosan

Grade: Medical, Pharmaceutical

Source Material: Crustacean CAS: 9012-76-4

Storage Conditions: <25°C, cool dry environment, well-sealed

Quantity:
Manufacture Date:
Testing Date:
Base Chitosan Lot No.:
Plasma-Treated Lot No. Number:

300 Grams January 8, 2020 January 24, 2020 381215

Plasma-Treated Lot No. Number: 20-0001 Shelf-Life: 36 months

Test Item	Specification	Results
Appearance	Off-white powder	Conform
Deacetylation (%)	≥90	Conform
Particle size (mesh)	100	Conform - 95% through 100 mesh
Viscosity (mpa.s, 20°C)	<200	75.1
рН	6.5-8.5	Conform
Moisture content (%)	≤10.0	7.6
Ash (%)	≤1.0	061
Insoluble in acetic (%)	≤1.0	0.10
Heavy metals (ppm)	≤10.0	Conform
As - Arsenic (ppm)	≤1.0	Conform
Pb - Lead (ppm)	≤2.0	<1.0 ppm
Cadmium	0.2 ppm	Conform
Mercury	<0.05	Conform
Total plate count (cfu/g)	≤1000	82.5
Escherichia Coli	Absent	Conform
Coliform bacteria	Absent	Conform
Salmonella Pr. 25G	Absent	Conform

<100 cfu/g

(LAL test negative for endotoxin)

<100

Post Plasma-Treated Test Dates: February 5, 2020 and March 4, 2020

Allak

Mould and Yeast

Endotoxin (EU/g)

Testing Supervisor: Nicole Parks - Director of QA/QC



Conform

<10.0 USP <85>