

## Certificate of Analysis

Date of Testing: 2023-02-02 17:26:58  
Date of Next Testing: 2027-02-01 17:26:58  
Product Name: **Chitosan**  
CAS Number: 9012-76-4  
Specifications & Purity:  $\geq 95\%$  (deacetylated), viscosity 100-200 mPa.s from shrimp shells  
Lot #: A2331437  
SKU #: **C105799**  
Analysis: **157350**

Parameter	Limit Values	Result
Deacetylation value	95-100 (%)	95.39%
Viscosity(1% in 1% acetic acid)	100-200 (mPa·S)	120.00 mPa·S
Ash	0-1.5 (%)	0.32%
Water by Karl Fischer	0-10 (%)	9.05%
(As)Arsenic	0-0.5 (ppm)	0.49 ppm
Total number of bacteria	0-1000 (cfu/g)	847.00 cfu/g
Heavy metals	0-10 (ppm)	8.00 ppm
Total yeasts and molds count(TYMC)	0-100 (cfu/g)	75.00 cfu/g
bulk density	$\geq 0.3$ (g/ml)	0.32 g/ml
Appearance (C105799)	off-white to yellow to tan powder or chunks	off-white to yellow to tan powder or chunks
Escherichia Coli	none detected	none detected
Salmonella	none detected	none detected



John Su  
QA & QC Manager