

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-02-02 15:46:40
Date of Next Testing: 2027-02-01 15:46:40
Product Name: **Chitosan**
CAS Number: 9012-76-4
Specifications & Purity: $\geq 95\%$ (deacetylated) ,viscosity 100-200 mPa.s from shrimp shells
Lot #: A2331433
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 | ≥ 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