

## Certificate of Analysis

Date of Testing: 2024-03-19 14:49:45  
Date of Next Testing: 2028-03-18 14:49:45  
Product Name: **Chitosan**  
CAS Number: 9012-76-4  
Specifications & Purity:  $\geq 95\%$  (deacetylated) ,viscosity 100-200 mPa.s from shrimp shells  
Lot #: C2409045  
SKU #: **C105799**  
Analysis: **324197**

| Parameter                          | Limit Values                                | Result                                      |
|------------------------------------|---|---|
| (As)Arsenic                        | 0-0.5 (ppm)                                 | 0.23 ppm                                    |
| Deacetylation value                | 95-100 (%)                                  | 95.20 %                                     |
| Total number of bacteria           | 0-1000 (cfu/g)                              | 40.00 cfu/g                                 |
| Viscosity(1% in 1% acetic acid)    | 100-200 (mPa·S)                             | 118.00 mPa·S                                |
| Ash                                | 0-1.5 (%)                                   | 0.34 %                                      |
| Total yeasts and molds count(TYMC) | 0-100 (cfu/g)                               | 10.00 cfu/g                                 |
| Water by Karl Fischer              | 0-10 (%)                                    | 7.83 %                                      |
| bulk density                       | $\geq 0.3$ (g/ml)                           | 0.30 g/ml                                   |
| Heavy metals                       | 0-10 (ppm)                                  | 8.00 ppm                                    |
| Escherichia Coli                   | none detected                               | none detected                               |
| Salmonella                         | none detected                               | none detected                               |
| Appearance (C105799)               | off-white to yellow to tan powder or chunks | off-white to yellow to tan powder or chunks |



John Su  
QA & QC Manager