

## CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by TUV SUD America Inc.  
 Certificate Number. 951001163

Catalogue Number J64143  
 Lot Number R30L025  
 Description Chitosan, 85% deacetylated  
 CAS Number 9012-76-4  
 Quality Test/Release Date 30/Jul/2025  
 Suggested retest date 30/Jul/2030  
 Country of Origin China

Result Name	Units	Specifications	Test Value
Ash	%	≤1.0%	0.71
Assay (special)	%	≥85.0% (DAC)	92.7
Assay (special)	%	Protein: ≤0.2%	0.18
Assay (special)	cfu/ gm	Yeast and mold: ≤100 cfu/ gm	Qualified
Appearance (Color)		White	White
Elemental Analysis		As: ≤ 0.5ppm; Ni: ≤ 1.0ppm; Cd: ≤ 0.2ppm; Fe: ≤ 100ppm; Pb: ≤ 0.5ppm; Hg: ≤ 0.2ppm	Conforms
Form		Powder	Powder
Insoluble material	%	≤0.5%	0.09
Particle Size		Mesh size: 80 (95%)	Qualified
Viscosity	cps	20-500 cps	26
Water Content	%	≤10.0%	9.35



John Astarita  
 Director, Quality

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.