

Certificate of Analysis

Promecens Quaternary Chitosan

Product Name: Quaternary Chitosan (N,N,N-Trimethylated Chitosan Derivative)

CAS No.: 51395-94-1

Molecular Weight (Avg.): 145 kDa (Customizable)

Batch No.: QCh/01/2025

Date of Manufacture: April 2026

Expiry Date: March 2028

Manufacturer: Promecens Entosystems Private Limited

Analytical Test Results

Sr. No.	Test Parameter	Specification	Result
1	Appearance	White to pale yellow powder	Pale yellow
2	Odor	Odorless	Odorless
3	Solubility (in water)	Freely soluble	Passes
4	Degree of Quaternization	≥ 0.12-0.45	0.42%
5	Purity (on dry basis)	≥ 95%	99.23%
	Degree of Deacetylation	≥ 85%	86.54%
6	Viscosity (1% solution, 25°C)	1 – 20 cS	2.3 cS
7	pH (1% aqueous solution)	4.0 – 7.0	4.2
8	Insoluble substances	≤ 1.0%	0.12%
9	Heavy Metals (as Pb, ppm)	≤ 10 ppm	NIL

Product conforms to specification for pharmaceutical, agricultural, and cosmeceutical-grade quaternized chitosan.

On behalf of Promecens Entosystems Pvt. Ltd.