

Certificate of Analysis

Promecens Trimethyl Chitosan (TMC)

Product Name: N,N,N-Trimethyl Chitosan Chloride (TMC)

CAS No.: [52349-26-5]

Molecular Formula: (C₉H₁₈NCIO₄)_n

Batch No.: TMC/01/2025

Date of Manufacture: June 2025

Expiry Date: May 2028

Manufacturer: Promecens Entosystems Private Limited

Analytical Test Results

Sr. No.	Test Parameter	Specification	Result
1	Appearance	Light Yellow	Light-yellow powder
2	Odor	Odorless	Odorless
3	Solubility	Freely soluble in water & acid	Passes
4	Degree of Quaternization	≥ 80%	82.6%
5	Purity (on dry basis)	≥ 95%	96.4%
6	Viscosity (1% solution, 25°C)	2 – 10 cP	3.1 cP
7	pH (1% aqueous solution)	5.0 – 7.5	6.1
8	Residue on Ignition	≤ 1.0%	0.35%
9	Heavy Metals (as Pb, ppm)	≤ 10 ppm	<5 ppm
10	Microbial Count (TVC, CFU/g)	≤ 1000	<100

Remarks

Batch meets all technical specifications for TMC—suitable for mucosal drug delivery systems, biopolymer films, and advanced cosmeceutical formulations.

Authorized Signatory:

Abhinav Chauhan

Quality Assurance

On behalf of Promecens Entosystems Pvt. Ltd.