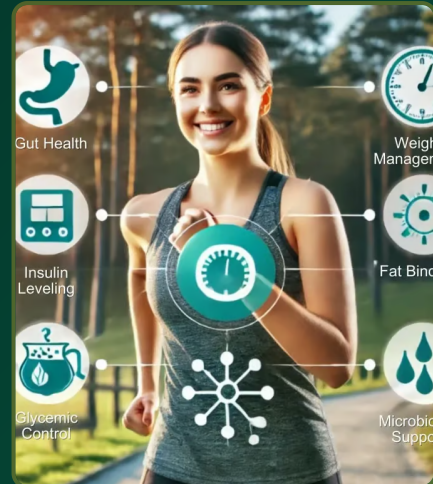


High-Charge Chitosan Derivatives for Agriculture, Industry, and Food Applications

Supplying advanced, publicly verified chitosan oligosaccharide formats for next-generation formulation and product development.

[Explore AG](#)[Explore IG](#)[Explore FG](#)[Wholesale Pricing](#)

The Bio-Polymer Platform for Sustainable Innovation

Chitosan Global provides high-performance, cationic biopolymer solutions derived from sustainable chitin sources. By focusing on advanced oligosaccharide formats—available from carefully controlled mushroom and Black Soldier Fly (BSF) origins—we deliver the solubility, reactivity, and consistency required by modern agricultural, industrial, and nutritional formulators.

Core Derivative Portfolio

AGRICULTURE GRADE

Chitosan AG

~70 mV Charge

Chitosan
Oligosaccharide
Hydrochloride

INDUSTRIAL GRADE

Chitosan IG

~70 mV Charge

Chitosan
Oligosaccharide
Hydrochloride

FOOD GRADE

Chitosan FG

60 mV Charge

Chitosan
Oligosaccharide Lactate

- Plant biostimulant formulations
- Seed treatment integration
- Foliar spray compatibility
- Crop protection inputs

- Water treatment & clarification
- Environmental remediation
- Biodegradable coatings
- Advanced materials

- Functional food matrices
- Nutraceutical development
- Dietary supplements
- Digestive wellness formats

Why High-Charge Formats Matter

Water Solubility

Unlike native, high-molecular-weight chitosan base polymers, our specific oligosaccharide salt formats are highly water-soluble, simplifying integration into liquid sprays, matrices, and treatment systems.

Oligosaccharide Formats

Low molecular weight chains enable rapid dispersion and functional reactivity, allowing for more efficient interaction in agricultural and industrial environments.

Strong Cationic Interaction

Maintaining a positive charge profile under targeted formulation conditions allows these derivatives to effectively bind with negatively charged particles, surfaces, and cellular structures.

Origin Flexibility

Available in both mushroom and Black Soldier Fly (BSF) origins, providing sustainable, non-crustacean supply chain options for vegan or specialized commercial requirements.

Commercial Applications



CHITOSAN AG

Agricultural Efficacy

Engineered as a water-soluble hydrochloride salt, Chitosan AG delivers high-charge performance designed for modern crop inputs. Its low molecular weight structure supports efficient integration into agronomic practices.

- Enhances early seedling vigor and seed coating performance.
- Integrates easily into liquid foliar fertilizers and irrigation lines.
- Acts as a functional elicitor in sustainable crop protection.

CHITOSAN IG

Industrial Performance

Chitosan IG leverages strong electrostatic binding capacity to serve as a potent cationic polymer in industrial settings. It offers an eco-friendly alternative to specific synthetic flocculants and resins.

- Flocculation of suspended solids and wastewater clarification.
- Binding capabilities for heavy metal and contaminant remediation.
- Bio-based component for sustainable material engineering and coatings.





CHITOSAN FG

Food & Nutritional Grade

Formulated as a lactate salt for superior bioavailability and stability, Chitosan FG meets the stringent demands of the nutraceutical sector. Its refined oligosaccharide structure supports rapid absorption.

- Bioactive ingredient for functional food matrices and drinks.
- Digestive support and gut microbiome formulations.
- Metabolic wellness dietary supplements and powders.

Publicly Listed Specifications

PRODUCT	SALT FORM	GRADE	ORIGIN OPTIONS	CHARGE DENSITY	SOLUBILITY	PRIM. COMI FIT
Chitosan AG	Hydrochloride	Agriculture	Mushroom / Insect	~70 mV	Fully Water Soluble	Crop Biosti
Chitosan IG	Hydrochloride	Industrial	Mushroom / Insect	~70 mV	Fully Water Soluble	Water Treatr Mate
Chitosan FG	Lactate	Food	Mushroom / Insect	60 mV	Fully Water Soluble	Nutra & Suppl

** Note: As presented on current product pages, specifications for Chitosan AG publicly list a molecular weight of < 3000 Da and a Degree of Deacetylation (DDA) of 90%.*

Built for Formulators

Liquid Fertilizers & Sprays

Water Clarification

High water solubility prevents nozzle clogging and ensures uniform distribution of the cationic polymer across leaf surfaces.

Rapid dispersion and strong positive charge enable swift binding with negatively charged particulates and organics in effluent streams.

Dietary Supplements

The lactate salt formulation of FG provides a neutral taste profile and stable integration into capsules, tablets, and functional powders.

Seed Coatings

Low molecular weight oligomers penetrate seed coats effectively, supporting germination treatments without physical binding issues.

COMMERCIAL SOURCE DIRECTORY

[AG Product Profile →](#) [AG Purchase & Specs →](#) [IG Product Profile →](#) [FG Product Profile →](#)

[Wholesale Directory →](#)

Ready to formulate the future?

Secure high-quality, verified bulk chitosan derivatives for your next commercial project.

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[Contact Technical Team](#)