Chitosan Quaternary Ammonium Salt

Crustacean shell · Shell

INDICATIVE SPECIFICATION — CONFIRMED IN WRITING AT QUOTATION

BOTANICAL SOURCE	SOURCE / PART	PRIMARY MARKER	METHOD
Crustacean shell	Shell	Degree of substitution	As agreed
MINIMUM ORDER	**LEAD TIME**	**STANDARD PACK**	**DOCUMENT SET**
1 kg	1–7 days	1 kg foil pouch	COA, TDS, SDS, statements

SPECIFICATION

PARAMETER	SPECIFICATION	METHOD / NOTE
Degree of substitution	≥90% (titration)	As agreed
Source / part	Shell	Declaration
Extraction	Quaternization of chitosan	Process
Particle size	80 mesh, other sizes on request	Sieve
Marker compounds	Quaternary chitosan, HACC	Identity / profile
Appearance	Off-white to light yellow powder	Visual
Solubility	Water-soluble; cosmetic grade	Matrix dependent
Standard packaging	1 kg foil pouch · 25 kg fiber drum · 5 kg carton	Food-grade liner

APPLICATIONS

- Beauty-from-within capsules
- Skin care formulas
- Antioxidant blends
- Functional beverages

AVAILABLE FORMS

- Spray-dried powder
- Granulated powder

WHAT TO CONFIRM BEFORE ORDERING

- This is a cosmetic/industrial grade, not a food ingredient; confirm the intended use.
- Crustacean-derived; allergen and documentation requirements apply.

Indicative document. This sheet describes the grade we can quote; it is not a batch COA and does not confirm a specific result for a specific lot. Final specification, contaminant limits, and documentation are agreed in writing before the order. Source, part, carrier, and marker method are release parameters, not marketing descriptions.

DOCUMENTATION RELEASED WITH EACH LOT

DOCUMENT	CONTENT	SCOPE
Certificate of analysis	Identity, assay, physical parameters, contaminants, methods, limits, and release decision.	Batch-specific
Technical data sheet	Botanical source, plant part, carrier, solubility, storage, packaging, and applications.	Product-level
Safety data sheet	Sixteen sections covering hazards, handling, storage, transport, and emergency response.	Grade-specific
Allergen and GMO statements	Major allergens, gluten, animal-derived inputs, and GMO status.	Batch-specific
Origin and traceability record	Herb lot reference and the link to the manufacturing lot.	Batch-specific
Halal, Kosher, organic	Certificates where the grade and facility are covered; organic also requires a transaction certificate.	Per certificate scope

TESTING APPROACH

- **Identity:** macroscopic and TLC fingerprint against a reference.
- **Assay:** HPLC or UV-VIS with the method and basis stated on the COA.
- **Physical:** appearance, moisture, ash, mesh, bulk density, and flow.
- **Contaminants:** heavy metals by ICP-MS, residual solvents by GC, pesticide panel by LC-MS/MS and GC-MS/MS.
- **Microbiology:** TPC, yeast and mould, E. coli, and Salmonella, with additional organisms as agreed.
- **Verification:** third-party testing available for new suppliers and high-value grades.

HOW TO REQUEST THIS GRADE

01 · BRIEF

Send the target specification, quantity, application, and destination market.

02 · COUNTER-SPEC

We confirm what can be matched and list the documents available for the grade.

03 · SAMPLE & QUOTE

A sample with its own COA, followed by price break points and lead time in writing.

Contact. Email info@rainwoodbio.com with the product name and the destination market. We reply within one business day. The specification index and further technical notes are available at ingredients.rainwoodbio.com.