Rainwood
BOTANICAL

SPECIFICATION SHEET
RW-128 · BEAUTY

Fucoxanthin

Undaria pinnatifida · Whole algae

INDICATIVE SPECIFICATION — CONFIRMED IN WRITING AT QUOTATION

BOTANICAL SOURCE	SOURCE / PART	PRIMARY MARKER	METHOD
Undaria pinnatifida	Whole algae	Fucoxanthin	HPLC
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
Fucoxanthin	10% (HPLC)	HPLC
Source / part	Whole algae	Declaration
Extraction	Algae extraction and purification	Process
Form	Oil / oil suspension	Specification
Marker compounds	Fucoxanthin, carotenoids	Identity / profile
Appearance	Orange to dark orange powder or oil	Visual
Solubility	Oil-soluble; not water-soluble	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

- Powder
- Oil suspension

WHAT TO CONFIRM BEFORE ORDERING

- Fucoxanthin is marine-derived and oxidation-sensitive; confirm the carrier and storage.
- The colour is intense; test the dose in the final capsule or food.

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.