

PRODUCT: WHOLE SMALL GREEN CARDAMOM (8MM BOLD GRADE)

PRODUCT IDENTIFICATION & BOTANICAL SOURCE

Botanical Name:	Elettaria cardamomum
Plant Part Used:	Dried Mature Capsules (Whole Pods)
Geographical Origin:	Idukki, Kerala, India
Process Description:	Carefully handpicked mature green cardamom pods, mechanically washed and systematically dried in specialized heat chambers (retaining natural green chlorophyll matrix), followed by precise multi-stage air-screen cleaning and size grading to isolate uniform 8mm capsules. Free from added artificial coloring.

REGULATORY IDENTIFIERS & CROSS-REFERENCES:

CAS Number:	85940-32-5	FEMA Number:	2240 (As Source)
EINECS Number:	288-922-1	CoE Number:	178
Product Standard:	Conforms to ISO 6754	HS Tariff Code:	0908.31.20
US FDA Status:	21 CFR 182.10 (GRAS)	EU Status:	Natural Food Ingredient

PHYSICAL-GRADING & SENSORY PROPERTIES

Test Parameter	Specification Range	Method
Size Definition:	Min. 95% of pods \geq 8.0 mm	Digital Caliper / Sieve
Appearance:	Plump, well-formed pods	Visual Inspection
Color:	Uniform deep to light green	Visual / Colorimeter
Odor:	Aromatic, warm, spicy	Olfactory
Taste:	Pungent, sweet, balsamic	Gustatory
Extraneous Matter (w/w):	Maximum 0.5%	ASTA Method 1.0
Empty / Blighted Pods:	Maximum 1.0% by count	Visual Counting
Immature / Shrivelled Pods:	Maximum 2.0% by weight	Visual Separation
Insect Defiled / Damaged:	Maximum 1.0% by count	ASTA Method 1.0

CHEMICAL & INTERNAL QUALITY STANDARDS

Test Parameter	Specification Limit	Method
Moisture Content (w/w):	Maximum 11.0%	ASTA Method 2.0
Volatile Essential Oil:	Minimum 3.5%	ESA / ISO 6754 (Distill)
Total Ash Content (w/w):	Maximum 7.0%	ASTA Method 3.0
Acid-Insoluble Ash (w/w):	Maximum 1.0%	ASTA Method 4.0

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MICROBIOLOGICAL SPECIFICATIONS

Organism	Specification Limit	Method
Total Plate Count (TPC):	≤ 100,000 CFU/g	ISO 4833
Yeast & Mold:	≤ 1,000 CFU/g	ISO 21527
Enterobacteriaceae:	≤ 100 CFU/g	ISO 21528
Escherichia coli:	Absent in 1 g	ISO 16649
Salmonella spp.:	Absent in 25 g	ISO 6579

PURITY & CHEMICAL CONTAMINANTS

Contaminant	Specification Limit	Regulatory Reference
Heavy Metals (Total):	≤ 5.0 ppm	USP <2232>
- Lead (Pb):	≤ 1.0 ppm	EU Regulation 2023/915
- Arsenic (As):	≤ 0.5 ppm	FDA Action Baseline
- Cadmium (Cd):	≤ 0.5 ppm	EU Regulation 2023/915

PESTICIDE RESIDUES & MAXIMUM RESIDUE LIMITS (MRL)

EU Market Compliance:	Meets all strict Maximum Residue Limits (MRL) set forth by EC Regulation No 396/2005 (and amendments) for Cardamom/Spices.	
US Market Compliance:	Complies with EPA (Environmental Protection Agency) tolerances under 40 CFR Part 180 and FDA compliance guidelines.	
ANZ & Canada Market:	Complies with FSANZ Schedule 20 and Health Canada MRL database.	
Critical Compound Targets:	Acetamiprid:	< 0.01 ppm
	Profenofos:	< 0.01 ppm
	Triazophos:	< 0.01 ppm
	Carbendazim:	< 0.10 ppm
	Chlorpyrifos:	< 0.01 ppm
Analytical Method:	Checked via Multi-Residue Analysis (MRM) using LC-MS/MS & GC-MS/MS.	

MYCOTOXINS & FUMIGANTS

Mycotoxins (Aflatoxins):	B1 ≤ 5.0 ppb; Total (B1+B2+G1+G2) ≤ 10.0 ppb
Ochratoxin A:	≤ 15.0 ppb
Residual Fumigants:	Methyl Bromide / Phostoxin: Absent (< 0.01 ppm)

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GLOBAL COMPLIANCE & DIETARY DECLARATIONS

Natural Status:	100% Pure, Raw Whole Agricultural Spice. Conforms to: - US FDA 21 CFR 182.10 (Spices & Other Natural Seasonings) - European Spice Association (ESA) Minimum Quality Specifications - Health Canada Food & Drug Regulations - Australia New Zealand Food Standards Code (FSANZ)
Allergen Matrix:	Free from all major global allergens (US FALCPA, EU 1169/2011, and FSANZ). Zero presence of Gluten, Nuts, Soy, Dairy, or added Sulphites.
GMO & Irradiation Status:	Non-GMO. Product has not been genetically modified. Sterilization via steam treatment only (if requested). No Ethylene Oxide (EtO) or Gamma treatment applied.
Dietary Certification:	Kosher Certified: Yes Halal Certified: Yes Vegan & Vegetarian Suitable: Yes

PACKAGING, STORAGE, & SHELF LIFE

Packaging:	Multi-wall, high-barrier food grade paper bags with inside polyliner, or multi-layer co-extruded polymer bags (typically 10 kg net weight). Packed inside carton master boxes.
Storage Conditions:	Store in original sealed packaging in a cool, dark, and dry warehouse environment. Optimal temperature: 10°C – 18°C. Keep relative humidity (RH) below 60% to actively protect natural green chlorophyll pigment from bleaching and mold risks.
Shelf Life:	24 Months from packaging date when stored under recommended unopened conditions.