



Draft Analysis Report

Physical Description:- Small cardamom, free from any foreign odour, mustiness or rancidity, mould, living and dead insects, insect fragments, rodent contamination & added colouring matter and other harmful substances.

FSSR Clause no.- 2.9.2.1 (Cardamom (Chhoti Elaichi) Whole)

S. No.	Parameter	Test Result	FSSR, 2011	Protocol
Chemical Analysis:				
1	Aroma / Odour	Characteristic	Characteristic	IS 2447
2	Extraneous matter, % by wt	ND,[DL-0.001]	NMT 1.0	IS 1797
3	Empty and malformed capsules, % by wt	Absent	NMT 3.0	IS 1907
4	Immature and shrivelled capsules, % by wt	Absent	NMT 3.0	IS 2447
5	Moisture, % by wt	8.99	NMT 13	IS 1797
6	Total Ash Content, % by wt	3.71	NMT 9.5	IS 1797
7	Volatile oil content on dry basis, v/w	7.50	NLT 3.5	IS 1797
8	Insect damaged matter, % by wt	Absent	NMT 1.0	IS 1797
9	Bulk Density, g/ml	450	Not specified	FL/SOP/FC-84
10	Non-Volatile Ether Extract, % by wt	10.90	Not specified	IS 1797

ND=Not Detected; **DL**=Detection Limit; **NLT**=Not Less Than; **NMT**=Not More Than

Cardamom COA

Draft Analysis Report

Physical Description:- Moti Elaichi free from foreign odour, mustiness and rancidity, free from mould, living and dead insects, insect fragments, rodent contamination & added colouring matter and any harmful substance.

FSSR Clause no.- 2.9.2.4 (Large Cardamom (Badi Elaichi) whole)

S. No.	Parameter	Test Result	FSSR, 2011	Protocol
Chemical Analysis:				
1	Aroma / Odour	Characteristic	Characteristic	IS 2447
2	Extraneous matter, % by wt	ND,[DL-0.001]	NMT 1.0	IS 1797
3	Moisture, % by wt	8.72	NMT 12	IS 1797
4	Volatile oil content of seeds on dry basis, v/w	1.89	NLT 1.0	IS 1797
5	Total Ash Content, % by wt	5.10	NMT 8.0	IS 1797
6	Empty and malformed capsules, % by wt	0.11	NMT 2.0	IS 1907
7	Immature and shrivelled capsules, % by wt	Absent	NMT 2.0	IS 2447
8	Insect damaged matter, % by wt	ND,[DL-0.001]	NMT 1.0	IS 1797
9	Bulk Density, g/l	0.3981	Not specified	FL/SOP/FC-84
10	Non Volatile Ether Extract, % by wt	3.15	Not specified	IS 1797

ND=Not Detected; **DL**=Detection Limit; **NLT**=Not Less Than; **NMT**=Not More Than



Discipline : Chemical Group : Food and Agricultural Products

Sr.No	Parameters	Units	Methods	Results of Analysis	Limit
1	Total Ash	g/100g	FSSAI Manual for Spices, Herbs and Condiments (006) : 2021	6.74	NMT 8.0
2	Moisture	g/100g	FSSAI Manual for Spices, Herbs and Condiments (003) : 2021	8.91	NMT 11
3	Protein	g/100g	SOP-CHM-137-00	12..81	Not Specified
4	Crude Fibre	g/100g	FSSAI Manual for Spices, Herbs and Condiments (014) : 2021	9.52	Not Specified

Discipline : Chemical Group : Residue and Contaminants in Food and Agricultural Products

Sr.No	Parameters	Units	Methods	Results of Analysis
1	Lead	mg/kg	SOP-CHM-27-01 (Part A)	<0.5

Comment : NMT- Not More Than, The result of Total Ash is On Dry Basis

Remark : The tested parameters conforms to the FSSAI Limits.

Cardamom, *Elettaria cardamomum*, is a herbaceous, perennial plant of the family *Zingiberaceae*. Its seeds are used as a spice which are obtained from the dried fruit of the plant which is also called as Pod. Cardamom Pod is recognized by its triangular cross-section and spindle-shape, with a thin, papery outer shell and small, black/brown seeds inside. Green cardamom is one of the most expensive spices. It is used as a mouth fresher, as a cooking spice, in sweet and savory dishes, in flavoring coffee and tea and in traditional medicines as well.

Cardamom Powder is made by grinding whole cardamom pods into powder which is Yellow-Green-Brown in color with characteristic Sweet, Pungent, Aromatic aroma and flavor.

Product information

Ingredients	Single ingredient, 100% Cardamom
Status	100% Organic, Pesticide residue free, Certified for NPOP, NOP, (EC) 834/2007 & (EU) 2018/848 standards
Fumigation	Not Treated with any Chemical. Naturally treated through Eco2 processing technique
Product Processing	Produced and processed according to current Good Manufacturing Practices (GMP), HACCP norms and regulations NPOP, NOP, (EC) 834/2007 & (EU) 2018/848
Heat Treatment	Steam treated

Organoleptic Description

Appearance	Yellow-Brown Fine Free-Flowing Powder
Flavor	Characteristic, Pungent, Sweet, Complex, Astringent
Odor	Characteristic, Aromatic, Fruity, Camphor

Physical-Chemical Characteristics¹

Particle size	90 % min passing thru 50 mesh
Moisture	12 % max
Total Ash	9 % max
Acid Insoluble Ash (AIA)	2.5 % max
Steam Volatile Oil (VO)	4 % min

Microbiological Characteristics²

Total Plate Count – TPC (max)	< 100,000 cfu/g
Salmonella	Absent in 2x375 g
Yeast and Mould – Y&M (max)	< 500 cfu/g
Coliforms (max)	< 1,000 cfu/g
<i>E. coli</i> (max)	< 10 cfu/g
<i>Enterobacteriaceae</i> (max)	< 1,000 cfu/g
<i>Staphylococcus aureus</i> (max)	< 10 cfu/g

**Mycotoxins³**

Product is routinely checked for Aflatoxin and Ochratoxin and it complies with the regulations of the destination country.

GM declaration³

To the best of our knowledge this product is non-GM and does not contain GM processing agents. This has been verified by organic certification and by traceability/identity preservation systems including adequate separation.

Allergens statement³

Free of any known Allergens.

Shelf life

Products are supplied with a minimum of 24 months to recommended shelf life (shown on product label) when stored sealed in original packaging under proper storage conditions. To maintain the product in best condition it is advisable to protect it from exposure to pests and extremes of moisture, light and temperature.

Product packaging

20 - 25 kg, PP Kraft Bags with heat sealed inner poly liner as Bergwerff standard. Other options can be suggested.

Any other mandatory requirements will be complying to the respective regulations of the destination country.

Note

¹ Testing shall be with reference to the methods prescribed in the manuals of ASTA, ESA, AOAC and Bergwerff.

² Testing shall be with reference to the methods prescribed in the manuals of USDA BAM, AOAC and Bergwerff.

³ These tests are performed when required. Certificates of Conformance are available on request.

Special remarks

The content of this specification is based on typical information for this product and results obtained from our own due diligence sampling, assessment, and testing protocols, in addition to any testing/sampling that has been undertaken by our supplier.

However, due to the nature of this product, which is not completely homogenous, test results are indicative / referral and may not be entirely representative of the product throughout the lot. In addition, the content of this Specification does not confirm or ensure that the product is safe for all intended uses other than as Spice and Condiment.

Our quality and technical documentation does not relieve the customer of their responsibilities to check that the goods supplied are suitable and considered safe for their intended use before purchase. The data provided is for information only.



Organic Cardamom Pods Bold Green

Product information

Botanical name	<i>Elettaria cardamomum</i>
Part of Plant	Pod
Typical country of origin*	Guatemala
Status	Organic

*Please note that country of origin may differ from that specified.

Organoleptic Description

All products are subject to routine organoleptic assessment.

Appearance Format: Whole	Dark green to pale green whole pods up to 2cm long, ovoid or oblong, plump or slightly shrunk. Contains pale to dark reddish brown seeds in each cavity in two rows.
Flavour	Aromatic, slight hint of lemon, sweet, perfumed, spicy, powerfully pungent
Odour	A strong perfume, sweet aroma

Processing

Drying method	Warm air
Further processing	*

*Heat treatment may have been undertaken on a batch-specific basis

Microbiological Analysis

Products are subject to routine microbiological analysis. Certificates of Conformance are available on request.

Maximum microbiological limits (cfu/g)	
TVC	$<5 \times 10^7$
Salmonella	absent in 25g
E.coli	$<10^3$

Preservatives (including benzoates, sulphur dioxide and/or sulphites at concentrations of more than 10mg/kg or 10mg/L (litre) etc)
Antioxidants
MSG and other glutamates
Yeast or yeast extract
Added salt and added sugars
Peanuts, Peanut Oil or derivatives
Other nuts and their derivatives including cold pressed nut derived oils
Sesame seeds, sesame seed oil or derivatives
Added mustard including derivatives
Added Celery including derivatives
Lupin and Lupin derivatives

Allergen advice: celery and mustard are handled on site.

GM declaration

To the best of our knowledge this product is non-GM and does not contain GM processing agents. This has been verified by organic certification and by traceability/identity preservation systems including adequate separation.

Organic Certification

The Organic Herb Trading holds organic certification with Soil Association Certification and Biodynamic Association Certification covering importation, processing and distribution of organic products. Current copies of our organic certification documents are available online or on request.

Declaration

We declare that the information given is believed to be correct as of the date specified below.

Yeast and mould	$<5 \times 10^5$
Enterobacteriaceae	$<10^4$ – only applicable to powdered items

Microbiological limits based on EU Pharmacopoeia standards for herbal infusions Category A.

Contaminants

All products are risk assessed by Organic Herb Trading to determine whether contaminant testing is required and on what frequency.

Pesticides: in accordance with the BNN Orientation Values

Mycotoxins (Ochratoxin & Aflatoxin): in accordance with Regulation (EC) 2022/1370 and 1881/2006

Pyrrolizidine Alkaloids: in accordance with Regulation (EU) 2020/2040

This is not an exhaustive list. Other tests are undertaken for surveillance purposes, or in light of emerging issues and/or changes to legislation or certification standards.

Typical Nutritional Data per 100g (Literature values from McCance and Widdowson)

Energy (kJ)	No data
Energy (kcal)	No data
Carbohydrate (g)	No data
of which sugars (g)	No data
Fat (g)	6.7
of which saturates (g)	No data
Protein (g)	10.8
Fibre (g)	No data
Sodium (mg)	18

Dietary suitability

This product is considered to be suitable for vegetarians and vegans.

Metal detection

All products are subject to routine metal detection.

Metal detector sensitivity	
Fe	3.5mm
Non-Fe	5.5mm
S/S	5.0mm

Packaging

	Kilo packs (below 5kg)	Bulk packs (above 5kg)
Outer Liner	Brown paper packet	White polypropylene sack/2 ply paper
Outer Seal	Polypropylene tape	Non re-sealable cable tie/stitching
Inner Liner	Food grade polythene liner	Food grade polythene liner
Inner Seal	Cellulose tape	Releasable cable tie

Shelf Life Guidance

Products are supplied with a minimum of 6 months to recommended Best Before End date (shown on pack). To maintain the product in best condition it is advisable to protect from exposure to pests and extremes of moisture, light, temperature and resealed after use.

Allergen and Additive information

To the best of our knowledge this product is free from the following:

Any bovine products or by products (including milk and milk derivatives)
Eggs or egg derivatives
Fish/crustaceans/molluscs and their derivatives
Cochineal
Gluten, wheat or wheat derivatives
Maize or maize derivatives
Soya or soya derivatives
Artificial colours and artificial flavourings
Added natural colours and natural flavourings