

APPENDIX V

STANDARD FOR SPICES DERIVED FROM DRIED OR DEHYDRATED SEEDS –CORIANDER

(For adoption at Step 5/8)

1 SCOPE

This standard applies to dried or dehydrated 'seeds'¹ – coriander as defined in Section 2.1 below, offered for direct human consumption, as an ingredient in food processing, or for repackaging if required. It excludes the product for industrial processing.

2 DESCRIPTION**2.1 Product definition**

Coriander is a product obtained from the dried or dehydrated mature fruit (seed) of *Coriandrum sativum* L. of Apiaceae family with the shapes spherical to elliptical, measuring approximately 2 mm to 6 mm in diameter.

Table 1: Common and scientific names of dried or dehydrated coriander

Common name	Trade name	Scientific name
Coriander or coriander seed	Coriander	<i>Coriandrum sativum</i> L.

2.2 Styles

Dried or dehydrated coriander seeds may be:

- Whole
- Split: Seeds broken into two approximately equal halves
- Cracked or broken: Broken into three or more pieces of varying sizes
- Ground/powdered

Other styles distinctly different from those mentioned above four are allowed, provided they are labelled accordingly.

3 ESSENTIAL COMPOSITION AND QUALITY FACTORS**3.1 Composition**

Dried or dehydrated coriander as described in Section 2 shall conform to the requirements specified in Annex I.

3.2 Quality factors

The products shall be safe and suitable for human consumption.

3.2.1 Odour, flavour, and colour

The product shall have a characteristic odour flavour and colour, which can vary depending on geo-climatic factors and conditions, and shall be free from any foreign odour and flavour especially from rancidity and mustiness. Dried or dehydrated seeds of coriander shall have a characteristic colour varying from yellowish brown to light brown.

3.2.2 Chemical and physical characteristics

Dried or dehydrated coriander shall comply with the requirements specified in Annex I (Table A1: Chemical characteristics of dried or dehydrated coriander, and Table A2: Physical characteristics of dried or dehydrated coriander). The defects allowed must not affect the general appearance of the product as regards its quality, keeping quality and presentation in the package.

4 FOOD ADDITIVES

Anticaking agents listed in Table 3 of the *General standard for food additives* (CXS 192-1995) are acceptable for use only in the ground/powdered form of coriander conforming to this standard.

5 CONTAMINANTS

The products covered by this Standard shall comply with the maximum levels of the *General standard for contaminants and toxins in food and feed* (CXS 193-1995), and shall be produced in accordance with *Code of practice for the prevention and reduction of mycotoxins in spices* (CXS 78-2017), *Code of practice for weed*

¹ Botanically known as dried fruits.

control to prevent and reduce pyrrolizidine alkaloid contamination in food and feed (CXC74-2015) and other relevant Codex texts.

The products covered by this standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

6 HYGIENE

It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the *General principles of food hygiene* (CXC 1-1969), the *Code of hygienic practice for low moisture foods* (CXC 75-2015), Annex III: Spices and dried culinary herbs, and other relevant Codex texts.

The products should comply with any microbiological criteria established in accordance with the *Principles and guidelines for the establishment and application of microbiological criteria related to foods* (CXG 21-1997).

7 WEIGHTS AND MEASURES

Containers shall be as full as practicable without impairment of quality and shall be consistent with a proper declaration of contents for the product.

8 LABELLING

The products shall be labelled in accordance with the *General standard for the labelling of pre-packaged foods* (CXS 1-1985). In addition, the following specific provisions apply:

8.1 Name of the product

8.1.1 The name of the product shall be the common name as described in Section 2.1.

8.1.2 The style of the product shall be as described in Section 2.2 (Styles).

8.1.3 The trade name and/or the scientific name may be indicated.

8.2 Country of origin and country of harvest

8.2.1 Country of origin shall be declared.

8.2.2 Country of harvest (optional).

8.2.3 Region of harvest and year of harvest (optional).

8.3 Commercial identification

- Style.
- Class or grade, if applicable.
- Particle size (optional)

8.4 Labelling of non-retail containers

The labelling of non-retail containers should be in accordance with the *General standard for the labelling of non-retail containers of foods* (CXS 346-2021).

9 METHODS OF ANALYSIS AND SAMPLING

9.1 Methods of analysis

The methods of analysis as described in Annex I, Table A3: Methods of analysis, will be included in CXS 234-1999 after endorsement by CCMAS and the following text will replace the table.

“For checking the compliance with this standard, the methods of analysis and sampling contained in the *Recommended methods of analysis and sampling* (CXS 234-1999) relevant to the provisions in this standard, shall be used.”

9.2 Sampling plan

To be developed.

ANNEX I

CHEMICAL AND PHYSICAL CHARACTERISTICS FOR DRIED OR DEHYDRATED CORIANDER

Table A1: Chemical characteristics for dried or dehydrated coriander

Product	Styles	Moisture content %w/w (max)	Total ash %w/w (max) on dry basis	Acid Insoluble ash %w/w (max) on dry basis	Volatile oils mL/100g (min) on dry basis
Coriander	Whole/split	9	7	1.5	0.1
	Cracked/broken/powdered /ground	9	7	1.5	0.09

Table A2: Physical characteristics for dried or dehydrated coriander

Product	Style	Extraneous matter* % w/w (max)	Foreign matter** %w/w (max)	Split /cracked / broken fruits % w/w (max)	Damaged or discoloured fruits*** % w/w (max)	Mouldy Material /Mould visible % w/w (max)	Insect defiled % w/w (max)	Dead whole insects, count /100 g (max)	Live insects (by count)	Mammalian excreta mg/kg (max)	Other Excreta**** mg/kg (max)
Coriander	Whole	2	0.5	10	3	1	1	4	0	6.6	2.2
	Split	2	1.5	NA	3	1	1	4	0	6.6	2.2
	Cracked/broken/ powdered /ground	N/A	NA	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A

Notes:

* Vegetative matter associated with the plant from which the product originates, but not accepted as part of the final product.

** Any visible or detectable objectionable foreign matter or material not usually associated with the natural components of the spice plant, such as sticks, stones, burlap bagging, metal, etc.

***This includes whole or split fruits that are damaged, discoloured or shrivelled.

**** Excreta from animals other than mammals, such as reptiles and birds.

N/A: Not applicable, means that this form of the above product has not been evaluated for this provision, and currently there are no values. N/A does not refer to zero

Methods of analysis for dried or dehydrated coriander

Table A3: Method of analysis

Parameter	Method*	Principle	Type ¹
Moisture content**	ISO 939	Distillation	I
Total Ash on dry basis**	ISO 939 and ISO 928	Calculation from moisture and ash (at 550°C) Distillation and Gravimetry	I
Acid Insoluble Ash (dry basis)**	ISO 939 and ISO 930	Calculation from moisture and ash (at 550 °C) Distillation and Gravimetry	I
Volatile oils (dry basis) **	ISO 939 and ISO 6571	Calculation from moisture and volatile oils Distillation and distillation	I
Extraneous Matter	ISO 927	Visual Examination followed by Gravimetry	I
Foreign Matter	ISO 927	Visual Examination followed by Gravimetry	I
Split fruits, Damaged or discoloured fruits	ISO 927	Visual Examination followed by Gravimetry	
Mouldy material / Mould visible	ISO 927	Visual Examination followed by Gravimetry	I
Insect Defiled	ISO 927	Visual Examination followed by Gravimetry	I
Live insect	ISO 927	Visual Examination (counting)	I
Dead insect	ISO 927	Visual Examination (counting)	I
Mammalian or/and Other excreta	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices https://www.fda.gov/food/laboratory-methods-food/mpm-v-8-spices-condiments-flavors-and-crude-drugs#v32	Visual Examination followed by Gravimetry	IV

Notes:

*The latest edition or version of the approved methods should be used

** For the whole coriander preparation sample, followed by ISO 2825

¹ According to the definition of “types of method of analysis” as per the Codex Procedural Manual Section II.