

C O D E X A L I M E N T A R I U S

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of the
United Nations



World Health
Organization

E-mail: codex@fao.org - www.codexalimentarius.org

STANDARD FOR CUMIN

CXS 327-2017

Adopted in 2017. Amended in 2021.

1. SCOPE

This Standard applies to cumin offered for direct consumption, as an ingredient in food processing, or for repackaging if required. It excludes cumin intended for industrial processing.

2. DESCRIPTION

2.1 Product Definition

Cumin is the product prepared from “seeds¹” of *Cuminum cyminum* L. of the Apiaceae family having reached appropriate degree of development for processing; and processed in an appropriate manner, undergoing operations such as cleaning, drying, grinding and sifting.

2.2 Styles

Cumin may be offered in one of the following styles:

- a) Whole / intact
- b) Cracked: broken into two or more pieces.
- c) Ground: processed into powders

2.3 Varietal Types

Not applicable

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Composition

Product as defined in Section 2.

3.2 Quality Factors

3.2.1 Moisture Content

Cumin (whole, cracked or ground) must not contain more than 10% moisture.

3.2.2 Odour, flavour and colour

Cumin shall have a characteristic aroma and flavour which can vary depending on geo-climatic factors/conditions. Cumin shall be free from any foreign odour or flavour and especially from mustiness. Cumin shall have a characteristic colour varying from light grey to dark brown.

3.2.3 Classification

Whole cumin may be classified in three classes/grades according to physical and chemical requirements as specified in Tables 1 and 2.

When ungraded, the provisions for Class/Grade III requirements apply as the minimum requirements.

3.2.4 Physical Characteristics

Whole cumin shall comply with the physical requirements specified in Table 1.

¹ Botanically known as “dried fruits”

Table 1. Physical requirements for whole cumin/cracked cumin (Allowed tolerances for defects)

Parameter	Class/Grade		
	I	II	III
Extraneous vegetable matter ¹ content, maximum, % mass fraction	1	2	3
Foreign matter ² content, maximum, % mass fraction	0.1	0.5	0.5
Mould visible, maximum, % mass fraction	1.0	1.0	1.0
Proportion of damaged/defective fruits ³ , maximum, % mass Fraction	5.0	5.0	5.0
Dead insects, insect fragments, rodent contamination max % mass fraction	0.1	0.5	0.5
Insect-damaged matter ⁴ , maximum, % mass fraction	0.5	1.0	1.0
Live insects	0	0	0
Mammalian excreta (mg/kg)	1.0	1.0	1.0

¹ Vegetative matter associated with the plant from which the product originates - but is not accepted as part of the final product"

² Any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, burlap bagging, metal etc.

³ Damaged, discoloured, shrivelled and immature seeds.

⁴ Cumin seeds that are damaged, discoloured or showing signs of bores as a result of infestation of insects so as to affect the quality of the materials.

3.2.5 Chemical Characteristics

Whole, cracked and ground cumin shall comply with the chemical requirements specified in Table 2.

Table 2. Chemical requirements for whole, cracked and ground cumin

Parameter	Requirement for grade, whole and cracked cumin			Requirement for ground cumin
	I	II	III	
Total ash, % mass fraction (dry basis), Maximum	8.5	10.0	12.0	9.5
Acid-insoluble ash, % mass fraction (dry basis), maximum	1.5	3.0	4.0	1.5
Volatile oils, ml/100 g (dry basis), Minimum	2.0	1.5	1.5	1.3

3.3 Classification of "Defectives"

A lot sample that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 (except those based on sample averages), should be considered as a "defective".

3.4 Lot Acceptance

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.2 when the number of “defectives”, as defined in Section 3.3, does not exceed the acceptance number of the appropriate sampling plan. For factors evaluated on a sample average, a lot will be considered acceptable if the average meets the specified tolerance, and no individual sample is excessively out of tolerance.

4. FOOD ADDITIVES

Anticaking agents as listed in Table 3 of the *General Standard for Food Additives* (CXS 192-1995) may be permitted for use in ground cumin only.

5. CONTAMINANTS

5.1 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).

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

6. FOOD HYGIENE

6.1 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, *Code of Hygienic Practice for Low-Moisture Foods* (CXC 75-2015) (Annex III) and other relevant Codex texts such as codes of hygienic practice and codes of practice.

6.2 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

8.1 The products covered by the provisions of this Standard shall be labelled in accordance with the *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985). In addition, the following specific provisions apply:

8.2 Name of the Product

8.2.1 The name of the product shall be "Cumin".

8.2.2 The name of the product may include an indication of the style/grade

8.2.3 Country of origin (Optional)

8.2.4 Inspection mark (Optional)

8.3 Labelling of Non-Retail Containers

Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

9. METHODS OF ANALYSIS AND SAMPLING

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.