

DRAFT STANDARD FOR CUMIN**1 SCOPE**

This Standard applies to dried fruits of any cultivated varieties (cultivars) of *Cuminum cyminum* L. of the *Apiaceae* family offered for industrial food production and for direct consumption, or for repackaging if required. [It does not apply to the product when indicated as being intended for further processing.]

2 DESCRIPTION**2.1 Product Definition**

Cumin is the product prepared from fruits of *Cuminum cyminum* L. 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 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.

3.2.2 Infestation

Cumin shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision).

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.

Table 1. Physical requirements for whole cumin

Parameter	Class/Grade		
	I	II	III
Extraneous matter ¹ content, maximum.% mass fraction	1	2	3
Foreign matter ² content, maximum.% mass fraction	practically absent	0.5	0.5
Proportion of damaged/defective fruits ³ , maximum.% mass fraction	5	5	5
Insect-damaged matter ⁴ , maximum. % mass fraction	1	1	1

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	
Moisture, % mass fraction, maximum	10	10	10	10
Total ash, % mass fraction (dry basis), maximum	8.5	10	12	9.5
Acid-insoluble ash, % mass fraction (dry basis), maximum	1.5	3	4	1.5
Volatile oils, ml/100 g (dry basis), minimum	2	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

No food additives and flavourings are permitted in the products covered by this standard.

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* (CODEX STAN 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.

¹ All vegetable matter from the specific plant other than the required part.

² Any visible and/or apparent matter or material not usually associated with the product.

³ Damaged, discolored, shriveled 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.

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 *General Principles of Food Hygiene* (CAC/RCP 1-1969), the *Code of Hygienic Practice for Spices and Dried Aromatic Herbs* (CAC/RCP 42-1995) 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 for the Establishment and Application of Microbiological Criteria for Foods* (CAC/GL 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 Pre-packaged Foods* (CODEX STAN 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 as described in Section 2.2.

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

9.1 Methods of Analysis

Provision	Method	Principle
Moisture	ISO 938:1980 Alternative: AOAC 2001.12 ASTA 2.0	Distillation
Total ash	ISO 928:1997 Alternative: AOAC 950.49 ASTA 3.0	Gravimetry
Acid-insoluble ash	ISO 930:1997 Alternative: ASTA 4.0	Gravimetry
Volatile oils	ISO 6571:2008 Alternative: AOAC 962.17 ASTA 5.0	Distillation

Provision	Method	Principle
Extraneous vegetable material	ISO 927:2009 Alternative: ASTA 14.1	Visual examination
Foreign matter	ISO 927:2009	Visual examination
Insect damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Buletin Number 5)	Visual examination

9.2 Sampling Plan

[To be developed]