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**Spices — Cumin (*Cuminum  
cyminum* L.) — Specification**

*Épices — Cumin (Cuminum cyminum L.) — Spécifications*

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## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6465 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 7, *Spices, culinary herbs and condiments*.

This second edition cancels and replaces the first edition (ISO 6465:1984), of which it constitutes a technical revision.

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# Spices — Cumin (*Cuminum cyminum* L.) — Specification

## 1 Scope

This International Standard specifies requirements for fruits<sup>1)</sup> of cumin (*Cuminum cyminum* L.).

Recommendations relating to storage and transport conditions are given in Annex A.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 927, *Spices and condiments — Determination of extraneous matter and foreign matter content*

ISO 928, *Spices and condiments — Determination of total ash*

ISO 930, *Spices and condiments — Determination of acid-insoluble ash*

ISO 939, *Spices and condiments — Determination of moisture content — Entrainment method*

ISO 948, *Spices and condiments — Sampling*

ISO 1108, *Spices and condiments — Determination of non-volatile ether extract*

ISO 2825, *Spices and condiments — Preparation of a ground sample for analysis*

ISO 6571, *Spices, condiments and herbs — Determination of volatile oil content (hydrodistillation method)*

ISO 6579, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp.*

## 3 Description

### 3.1 Form and appearance

Cumin consists of the fruits of *Cuminum cyminum* L., with two elongated mericarps which remain joined and the dimensions of which vary depending on the origin. Each mericarp, which is ochre-grey to light brown in colour, bears five thin pale primary ribs and four wider secondary ribs which are darker.

Ground cumin consists of product obtained by grinding the dried mature fruit of *Cuminum cyminum* L.

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1) Although the term “seeds” is currently used in commerce, the term “fruits” is the correct botanical term.

### 3.2 Odour and flavour

The flavour shall be characteristic, aromatic and not musty.

## 4 Requirements

### 4.1 Freedom from insects, moulds, etc.

Whole and ground cumin shall be free from living insects and moulds and shall also be free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision) or with such magnification as may be necessary in any particular case. If the magnification exceeds 10 times, this fact shall be stated in the test report. The product shall be free from added colour and harmful substances.

### 4.2 Extraneous and foreign matter

The total extraneous matter and foreign matter content, when determined by the method specified in ISO 927, shall not exceed the values given in Table 1 for each grade.

### 4.3 Classification

Cumin may be classified according to origin, and in three grades according to its extraneous matter and foreign matter content and the proportion of broken fruits, as specified in Table 1. Broken fruits means damaged, shrivelled, discoloured or immature seeds.

### 4.4 Chemical requirements

Whole and ground cumin shall comply with the requirements given in Table 2.

**Table 1 — Grades for whole cumin**

Grade	Extraneous matter content, max. % mass fraction	Foreign matter content, max. % mass fraction	Proportion of damaged/defective fruits, max. % mass fraction	Insect-damaged matter, max. % mass fraction
I	1	0,5	5	1
II	2	0,5	5	1
III	3	0,5	5	1

**Table 2 — Chemical requirements**

Characteristics	Requirement for grade			Cumin, ground	Method of test
	I	II	III		
Moisture content, % mass fraction, max.	9	10	12	12	ISO 939
Total ash, % mass fraction (dry basis), max.	8,5	10	12	9,5	ISO 928
Acid-insoluble ash, % mass fraction (dry basis), max.	1,5	3	4	1,5	ISO 930
Non-volatile ether extract, % mass fraction (dry basis), min.	15	15	12	15	ISO 1108
Volatile oil content, ml/100 g (dry basis), min.	2	1,5	1,5	1,3	ISO 6571

#### 4.5 Microbiological requirements

Salmonella shall be absent in 25 g of the product when tested as specified in ISO 6579.

### 5 Sampling

Sample consignments of cumin in accordance with ISO 948.

Prepare a ground sample for analysis in accordance with ISO 2825, such that the whole of the product passes through a sieve with openings of nominal size 500 µm. In view of the risk of loss of volatile oil, take appropriate precautions when carrying out grinding.

### 6 Methods of test

Samples shall be tested for conformity to the requirements of this International Standard by the methods of test referred to in Table 2.

### 7 Packing and marking

#### 7.1 Packing

Whole and ground cumin shall be packed in clean, sound and dry containers made of materials which do not affect the product.

#### 7.2 Marking

Each container shall be marked or labelled with the following particulars:

- a) the name of the product, and the trade name or brand name, if any;
- b) the name and address of the producer or packer;
- c) the batch or code number;
- d) the grade;
- e) the net mass;
- f) the producing country;
- g) the shelf-life of the product
- h) the year of harvest, if known;
- i) any other information requested by the purchaser;
- j) the number of this International Standard.

## **Annex A** **(informative)**

### **Recommendations relating to storage and transport conditions**

**A.1** Containers should be stored in closed premises, protected from the sun, rain and excessive heat.

**A.2** The store-room should be dry, free from unpleasant odours and protected against the entry of insects or vermin. Ventilation equipment should be adjusted so as to ensure good ventilation during dry weather and to be fully closed in wet weather. Suitable arrangements should be made to allow fumigation of the store-room.

**A.3** Containers should be handled and transported so that they are protected from rain, sun and other sources of excessive heat, unpleasant odours and any contamination, particularly in the holds of ships.

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