هيئة التقييس لدول مجلس التعاون لدول الخليج العربية (GCC STANDARDIZATION ORGANIZATION (GSO

Final draft

GSO 05/FDS/ISO 6465 :2010 (E) ISO 6465 :2009

التوابل – الكمون – المواصفات Spices – Cumin (Cuminum cyminum L) - Specification

> إعداد اللجنة الفنية الخليجية لقطاع المواصفات الغذائية والزراعية

هذه الوثيقة مشروع لمواصفة قياسية خليجية تم توزيعها لإبداء الرأي والملحوظات بشأنها، لذلك فإنها عرضة للتغيير والتبديل، ولا يجوز الرجوع إليها كمواصفة قياسية خليجية إلا بعد اعتمادها من مجلس إدارة الهيئة.

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية هيئة إقليمية تضم في عضويتها الأجهزة الوطنية للمواصفات والمقاييس في دول الخليج العربية، ومن مهام الهيئة إعداد المواصفات القياسية الخليجية بواسطة لجان فنية متخصصة.

وقد قامت هيئة التقييس لدول مجلس التعاون لدول الخليج العربية ضمن برنامج عمل اللجنة الفنية رقم 7"اللجنة الفنية الخليجية لقطاع المواصفات الغذائية والزراعية" بتحديث هذه المواصفة القياسية الخليجية من قبل دولة الإمارات العربية المتحدة وقد تم إعداد المشروع " بتبني المواصفة القياسية الدولية (ايزو) رقم 6465:2009 " التوابل – الكمون – المواصفات " باللغتين العربية والانجليزية.

وقد اعتمدت هذه المواصفة كـ (مواصفة قياسية / لائحة فنية) خليجية دون إدخال أية تعديلات فنية عليها وذلك في اجتماع مجلس إدارة الهيئة رقم ()، الذي عقد بتاريخ / / هـ ، الموافق / م.

Foreword

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No.:5 "Technical committee for standards of food and agriculture products " has revised this Gulf Standard. The Draft Standard has been prepared by United Arab Emirates.

The draft Standard has been adopted the international standard No. 6465:2009 "Spices – Cumin (Cuminum cyminum L.)- Specification issued by (ISO) Which has been translated into Arabic.

This standard has been approved as a Gulf Technical Regulation by GSO Board of Directors in its meeting No.(),held on / / H, / / G.

Spices – **Cumin** (*Cuminum cyminum* L) - **Specification**

1 Scope

This Standard specifies requirements for whole and ground fruits of *Cuminum cyminum* L.

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

2 - Complementary references

- 2.1 GSO/ISO 927, Spices and condiments Determination of extraneous matter content.
- 2.2 GSO/ISO 928, Spices and condiments Determination of total ash.
- 2.3 GSO/ISO 930, Spices and condiments Determination of acid insoluble ash.
- 2.4 GSO/ISO 939, Spices and condiments Determination of moisture content -Entrainment method.
- 2.5 GSO/ISO 948, Spices and condiments Sampling.
- 2.6 GSO/ISO 1108, Spices and condiments Determination of nonvolatile ether extract.
- 2.7 GSO/ISO 2825, Spices and condiments Preparation of a ground sample for
- 2.8 GSO/ISO 6571 , Spices, condiments and herbs Determination of volatile oil content.
- 2.9 GSO/ISO 6579, Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of Salmonella species.
- 2.10 GSO 150, Expiration periods at food products.
- 2.11 GSO 9 Labelling of Prepackaged Foods.

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

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

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 seeds of *Cuminum cyminum* L .

4 - Requirements

4.1 Freedom from insects, moulds, etc.

Whole and ground cumin shall be free from living insects and moulds, and shall be practically 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 matter and foreign matter

The total extraneous matter and foreign matter content, when determined by the method specified in item 2.1, shall not exceed the value 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, shriveled, dis-coloured and immature seed.

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	Foreign matter	Proportion of	Insect damaged	
	matter	content max.	damaged/ defective	matter max.	
	content max.	% mass fraction	fruits max.	% mass fraction	
	% mass fraction		% mass fraction		
Grade	1	0.5	5	1	
1					
Grade	2	0.5	5	1	
2					
Grade	3	0.5	5	1	
3					

Table 2 - Chemical requirements

Characteristics	Requirement for grade		Cumin, ground	Method of test	
	I	II	III		
Moisture content, % mass fraction max.	9	10	13	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 oils 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 item ISO 2825, such that the whole of the product passes through a sieve of aperture size 500 pm. 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 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

Without prejudice to what is stated in the GSO standard "Labeling of prepackaged foods" mentioned in item (2.11). The following particulars shall be marked or labeled on each container:

- 7.2.1 Name of the product, and the trade name or brand name, if any;
- 7.2.2 Name and address of the producer or packer;
- 7.2.3 Batch or code number;
- 7.2.4 Grade;
- 7.2.5 Net mass;
- 7.2.6 Producing country;
- 7.2.7 Production and expiry date as in Gulf standard mentioned in item (2.10).
- 7.2.8 Any other information requested by the purchaser;
- 7.2.9 Year of harvest, if known;

Annex A

Recommendations relating to storage and transport conditions (informative)

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

mustiness	تعفن		
Shriveled fruits	ثمار ذابلة		
damaged fruits	ثمار محطمة		
acid non-soluble ash	رماد غير ذائب في الحمض		
Unpleasant odour	روائح كريهة		
volatile oils	زيوت طيارة		
mould	عفن		
naked eye	عین مجردة		
Cumin (Cuminum cyminum L).	كمون		
added colour	لون مضاف		
non-volatile ether extract	مستخلص اثیری غیر متطایر		
extraneous matter	الشوائب		