

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

**Final draft:**

**GSO5/FDS656/2013**

**PREPACKAGED WHOLE DATES**

Prepared by:  
Gulf technical committee for sector standards of  
Food and agriculture products

This document is a draft Gulf standard circulated for comments, it is therefore, subject to alteration and modification, and may not be referred as a Gulf standard, until approved by the Board of Directors.

ICS 67.080

## **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" Gulf technical committee for sector standards of food and an agricultural product " has updated the GSO Standard No **GSO5/FDS656/2013** " Prepackaged whole dates" The Draft Standard has been prepared by Saudi Arabia.

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

## PREPACKAGED WHOLE DATES

### 1. SCOPE

This standard applies to commercially prepared whole dates in pitted or unpitted styles packed ready for direct consumption. It does not apply to other forms such as pieces or mashed dates or dates intended for industrial purposes.

### 2. COMPLEMENTARY STANDARDS:

- 2.1 GSO Stander NO 9 "Labeling of prepackaged foods".
- 2.2 GSO Stander NO 21 "Hygienic regulation for food plants and their personal".
- 2.3 GSO Stander NO 150 "Expiration periods of food products Part 1".
- 2.4 GSO Stander NO 1016 "Microbiological Criteria for foodstuffs Part 1".
- 2.5 GSO Stander NO 657 "Method of test for prepackaged whole dates".
- 2.6 GSO Stander NO 1814 "General standard for Irradiated foods".
- 2.7 GSO Stander NO 382 "Maximum limits for pesticide residues in agricultural food products - Part 1".
- 2.8 GSO Stander NO 383 "Maximum limits for pesticide residues in agricultural food products - Part 2".
- 2.9 GSO CAC Stander NO 19 "Requirements For The Operation Of Irradiation facilities Used For The Treatment Of Foods".
- 2.10 GSO standard NO 839 "Food packages - part1 : general requirements".
- 2.11 GSO standard NO 1363 "Food packages - part 2 plastic packages - general requirements".
- 2.12 GSO standard NO 1791 "Three piece rounded steel cans used for canning food stuffs".

### 3. DEFINITIONS

#### 3.1 Dates

The product prepared from sound suitably ripe fruit of the date tree (*Phoenix dactylifera* L). They may be washed and/or pasteurized, and may be dried or hydrated to adjust the moisture content.

#### 3.2 pitted dates

Sound whole dates with the stones automatically or manually removed provided that they maintain the original shape.

#### 3.3 Cane sugar dates

Dates in which most of the sugar content is in the form of disaccharide sugar

(sucrose) such as Red Sukkari, yellow Sukkari, Maskani.

### **3.4 Invert sugar dates**

Dates in which most of the sugar content is in the form of invert sugar (glucose and fructose) such as Khalas, khudri, Ajwa, Sagai, Shaishi.

### **3.5 Pressed dates**

Dates compressed into layers by using mechanical force.

### **3.6 Loose dates**

Dates packaged without any mechanical force.

### **3.7 Strands**

Dates with complete individual attachments stem.

### **3.8 Batch**

Amount of dates have the same type and size, shape and packed in the same way under the same circumstances.

### **3.9 Irradiated Dates**

Dates ionizing radiation treatment at a specific dose to eliminate insect infestation in all its stages in accordance with the Gulf slandered mentioned in item (2.6)(2.9)

### **3.10 Souring dates**

Dates in which sugars have broken down into alcohol and acetic acid by yeasts and bacteria and its characterized by acetic taste. But the fruits that are in the primary fermentation stage with mild acidic taste are not considered defective.

### **3.11 Blemished dates**

Dates with change in color as a result of sunburn or having scars, black spots under the stem with flesh cracks (Black nose) or surface mutilations of an area exceeding that of a circle of 7 mm in diameter.

### **3.12 Decay dates**

Dates in a decomposed state and unacceptable in appearance.

### **3.13 Mould dates**

Dates characterized by the presence of visible mold hyphae.

### **3.14 Dirty dates**

Dates having embedded organic or inorganic materials such as dirt, sand or clay affecting an area over 3 mm in diameter

### **3.15 Dates having insects and mites damage or contamination**

Dates damaged by insects or mites or contaminated by the presence of dead insects, mites, their parts or excretions.

### **3.16 Damaged dates (for unpitted dates)**

Dates exposed to bruise and/or shredding in such a way that a good portion of their skin is damaged in such a manner that makes its outer appearance unacceptable.

### **3.17 Unripe dates**

Dates of light weight, having little flesh, and cracked, dry and rubbery texture. It includes dates which are not naturally dry as the variety itself.

**3.18 Unpollinated dates**

Dates not pollinated as evidenced by their thin flesh, immature characteristics and absence of pits (stones).

**3.19 Black nose**

Noticeable darkening of the head, generally accompanied by severe checking or cracking of the flesh.

**3.20 Side - spots**

a very dark patch extending into the flesh affecting an area at least as large as a circle of 5 mm diameter.

**3.21 Sunburn**

similar abnormalities affecting an area at least as large as a circle of 7 mm diameter

**4. CLASSIFICATION**

Dates shall be classified according to the following:

**4.1 Sugar types**

**4.1.1** Cane sugar varieties, such as: as Red Sukkari, yellow Sukkari, Maskani.

**4.1.2** Invert sugar varieties, such as: Khalas, khudri, Ajwa, Sagai, Shaishi.

**4.2 Styles**

**4.2.1** Unpitted dates.

**4.2.2** Pitted dates (unstuffed or stuffed).

**4.3 Size of date (optional)**

Dates are classified into three sizes: small, medium and large. The number of pitted and unpitted dates for each size per 500 grams shall be as indicated in the following Table:

**TABLE**  
**Size grading of dates**

Size	No. of dates in 500 g	
	Unpitted dates	Pitted dates
Small	More than 100	More than 110
Medium	80 to 100	90 to 110
Large	less than 80	less than 90

**5. REQUIREMENTS**

Whole prepackaged dates shall meet the following requirements:

**5.1** They shall be from the same variety and at the appropriate stage of maturity.

**5.2** They shall be free from live insects, their eggs, larvae and excretions and pathogenic.

**5.3** They shall possess a characteristic flavor of every variety type.

**5.4** They shall be approximately similar and uniform in color, form and size. The visible part of the contents of the package must be representative of the entire contents.

**5.5** The raw materials used in production shall comply with their relevant standards.

**5.6** It is allowed to add the following substances; provided that they comply with their relevant standards:

**5.6.1** Glucose syrup, sugars, flour, vegetable and tahinia (sesame paste) oils.

**5.6.2** Natural flavors; in case of filled dates.

**5.6.3** Glycerol or sorbitol, in case of dates covered with glucose syrup.

**5.7** The average weight of any unit of dates shall be not less than 4.0 grams for pitted dates and not less than 4.75 grams for unpitted dates.

**5.8** The moisture content shall not be more than 26% by weight for cane sugar varieties and not more than 30% by weight for invert sugar varieties.

**5.9** Pitted dates may be filled with coconut, almonds or any other type of nuts which should be suitable for human consumption, hygienic, dry and free from insects and fungi

**5.10** In pitted dates, there shall be not more than two pits or 4 pieces of pits per 100 dates.

**5.11** The metal impurities (such as metallic parts, nails, metallic fillings, ... etc.) shall not be more than 1 g/kg.

**5.12** Dates are classified into the following three classes:

**5.12.1** Extra classes

Dates in this class must be of superior quality. They must have the shape, development and colour characteristic of the variety and/or commercial type. They must be amber-coloured to brown and the flesh must be abundant, fat or semi-fat, and greasy. The epicarp must be translucent and, according to the variety, adhere to the flesh. They must be practically free from defects with the exception of very slight superficial defects provided that these do not affect the general appearance of the produce, the quality, the keeping quality or its presentation in the package.

**5.12.2** Class I

Dates in this class must be of good quality. They must be characteristic of the

variety and/or commercial type. The flesh must be sufficiently abundant, fat or semi-fat, according to the variety.

### 5.12.3 Class II

This class includes dates which do not qualify for inclusion in the higher classes but which satisfy the minimum requirements specified above.

- The following defects may be allowed provided that the dates retain their essential characteristics as regards general appearance, quality, keeping quality and presentation:

- defects of the epicarp not affecting the pulp
- defects in form or development
- defects of colouration.

### 5.13 Tolerances allowed of Size grading:

Defective Tolerances allowed the following :

Defects allowed	Tolerances allowed percentage of defective produce, by number or weight		
	<i>Extra</i>	<i>Class I</i>	<i>Class II</i>
<b>a) Tolerances for produce not satisfying the minimum requirements:</b>	5	10	20
-Immature or unpollinated fruit.	1	2	4
-Sour, decayed or moldy fruit.	zero	1	1
-Damaged by pests.	3	6	10
-Blemished, discolored or black nose, sunburnt, cracking of the flesh .	3	5	7
- Live insects (by number).	zero	zero	zero
<b>b) Size tolerances:</b>			
- Unpitted among pitted fruit (by number).	2	2	2
-Foreign matter (by weight).	1	1	1

- Dates belonging to other varieties than that indicated on the package (by number).	10	10	10
<b>c) Tolerances for other defects For dates not conforming to the minimum size.</b>	10	10	10

**5.14** Their production shall be according to the Gulf standard mentioned in (2.2).

**5.15** The microbiological criteria of micro-organisms shall be according to the Gulf standard mentioned in (2.4).

**5.16** They shall not contain any substances originating from micro-organisms in amounts which may represent a hazard to health.

**5.17** Pesticide residues shall not exceed the limits mentioned in the Gulf standards mentioned in (2.7),(2.8).

**5.18** Using of Radiation with proper Treatment is allowable according to GSO mentioned in (2.6), (2.9).

## **6. SAMPLING**

### **6.1 Gross samples**

Samples shall be taken at random from the production batch. At least 2 individual packages per each portion of 1000 kg shall be taken. From each individual package a sample of 300 shall be drawn. In all cases a sufficient amount to obtain a gross sample of not less than 3000 grams shall be taken. Samples shall be kept in clean and dry containers which do not affect its properties.

The gross sample is used for detection of live infestations and general cleanliness of the product prior to its examination for compliance with other provisions of this standard.

### **6.2 Sub-samples for examination and testing**

The gross sample shall be mixed well and small quantities taken at random from different places as follows:

- Chemical analysis - 500 g, microbiological tests - 500 g.
- Seed availability (for pitted dates) - 100 dates.
- Defects mentioned in 5.13 and size grading - 100 dates.

### **6.3 Sample report**

**6.3.1** The sample shall be accompanied with a report containing the following information:

- Type and condition of product (name - grade if any) - volume or weight of package ... etc.
- Source of the lot or the manufacturer's name and address.



- Place of shipment, and place and date of arrival.
- Place and date of sampling .
- Lot size and number of packages withdrawn for sampling.
- Batch number, code number or date of processing (if any).
- Place to which sample is delivered (for test).
- Sampled by ..... (Name of sampler).

**6.3.2** The following information shall be declared on each sample container:

- Number of report attached with the sample (6.3.1).
- Date of sampling.
- Name of sampler.

## **7. METHODS OF TEST**

Tests shall be carried out according to the Gulf standard mentioned in (2.5).

## **8. PACKAGING**

Dates shall be packed in suitable, clean, dry and water proof containers (food grade) to protect the product from contamination according to the Gulf standard mentioned in (2.10),(2.12),(2.13).

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## **9. LABELLING**

Without prejudice to what is mentioned in Gulf standard mentioned in (2.1) and Gulf standard mentioned in (2.3) the following information shall be declared on the labels:

**9.1** Name of the product.

**9.1.1** "Dates", "Dates coated with glucose syrup" or "Filled dates".

**9.1.2** "Unpitted" or "pitted" in addition to the size (small, medium or large).

**9.1.3** The name of the variety such as Red Sukkari, yellow Sukkari, Khalas, khudri

**9.1.4** Whether it is "pressed", "loose" or in "clusters".

**9.2** Name of the additives (if used).

**9.3** The stuff type or coating material (if any).

**9.4** Country of origin.

**9.5** The words "saved with irradiation" in the case of the use of irradiation and use the private irradiated foods logo.

## **10. Transportation and Storage**

shall be carried out in such a way to protect the container from

**10.1** Mechanical damage and contamination.

**10.2** The containers shall be stored in well ventilated stores far away from sources of heat and contamination.

## TECHNICAL TERMS

## المصطلحات الفنية

Damaged Dates.....	تمور مهشمة متضررة
Biemished Dates.....	تمور مشوهة
Unripe Dates.....	تمور غير ناضجة
Unpollinated Dates.....	تمور عذرية (شيص)
Dirty Dates .....	تمور متسخة
Souring Dates .....	تمور متحمضة
Mould Dates .....	تمور متعفنة
Deay Dates .....	تمور متحللة
Filled Dates.....	تمور محشوة
Pitted Dates.....	تمور منزوعة النوى
Packed Dates .....	تمور معبأة
Unpitted Dates.....	تمور غير منزوعة النوى
Mashed Dates .....	تمور مهروسة
Pressed Dates.....	تمور مكبوسة
Loose Dates .....	تمور مفككة
Invert Syrup.....	سكر محول (أحادي)
Strands.....	شماريخ
Stem.....	عنق
Date Tree (PHOENIX DACTYLIFERAL) .....	نخيل التمر
Irradiated Dates .....	تمور مشعة
coating material.....	مادة التغطية
Cane sugar .....	سكر ثنائي

**REFERENCE**

UNECE Standard DDP-08 (DATES) 2010

(Codex) Standard For Date No 143-1985