

## CODEX STANDARD FOR MANGOES

### CODEX STAN 184-1993

#### 1. DEFINITION OF PRODUCE

This standard applies to commercial varieties of mangoes grown from *Mangifera indica* L. of the *Anacardiaceae* family, to be supplied fresh to the consumer, after preparation and packaging. Mangoes for industrial processing are excluded.<sup>1</sup>

#### 2. PROVISIONS CONCERNING QUALITY

##### 2.1 MINIMUM REQUIREMENTS

In all classes, subject to the special provisions for each class and the tolerances allowed, the mangoes must be:

- whole;
- firm;
- fresh in appearance;
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- clean, practically free of any visible foreign matter;
- free of black necrotic stains or trails;
- free of marked bruising;
- practically free of damage caused by pests;
- free of damage caused by low temperature;
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste;
- sufficiently developed and display satisfactory ripeness.

When a peduncle is present, it shall be no longer than 1.0 cm.

2.1.1 The development and condition of the mangoes must be such as to enable them:

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<sup>1</sup> Governments, when indicating the acceptance of the Codex Standard for Mangoes, should notify the Commission which provisions of the Standard would be accepted for application at the point of import, and which provisions would be accepted for application at the point of export.

- to ensure a continuation of the maturation process until they reach the appropriate degree of maturity corresponding to the varietal characteristics,
- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

In relation to the evolution of maturing, the colour may vary according to variety.

## **2.2 CLASSIFICATION**

Mangoes are classified in three classes defined below:

### **2.2.1 “Extra” Class**

Mangoes in this class must be of superior quality. They must be characteristic of the variety. They must be free of defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

### **2.2.2 Class I**

Mangoes in this class must be of good quality. They must be characteristic of the variety. The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- slight defects in shape;
- slight skin defects due to rubbing or sunburn, suberized stains due to resin exudation (elongated trails included) and healed bruises not exceeding 3, 4, 5 cm<sup>2</sup> for size groups A, B, C respectively.

### **2.2.3 Class II**

This class includes mangoes which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Section 2.1 above. The following defects may be allowed, provided the mangoes retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape;
- skin defects due to rubbing or sunburn, suberized stains due to resin exudation (elongated trails included) and healed bruises not exceeding 5, 6, 7 cm<sup>2</sup> for size groups A, B, C respectively.

In Classes I and II, scattered suberized rusty lenticels, as well as yellowing of green varieties due to exposure to direct sunlight, not exceeding 40 per cent of the surface and not showing any signs of necrosis are allowed.

### 3. PROVISIONS CONCERNING SIZING

Size is determined by the weight of the fruit, in accordance with the following table:

Size Code	Weight (in grams)
A	200-350
B	351-550
C	551-800

The maximum permissible difference between fruit in the same package belonging to one of the above mentioned size groups shall be 75, 100 and 125 g respectively. The minimum weight of mangoes must not be less than 200 g.

### 4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each package for produce not satisfying the requirements of the class indicated.

#### 4.1 QUALITY TOLERANCES

##### 4.1.1 "Extra" Class

Five per cent by number or weight of mangoes not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

##### 4.1.2 Class I

Ten per cent by number or weight of mangoes not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

##### 4.1.3 Class II

Ten per cent by number or weight of mangoes satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting, marked bruising or any other deterioration rendering in unfit for consumption.

## 4.2 SIZE TOLERANCES

For all classes, 10 per cent by number or weight of mangoes in each package are permitted to be outside (above or below) the group size range by 50 per cent of the maximum permissible difference for the group. In the smallest size range, mangoes must not be less than 180 g and for those in the largest size range a maximum of 925 g applies, as follows:

Size Code	Normal Size Range	Permissible Size Range ( $\leq$ 10% of fruit/package exceeding the normal size range)	Max. Permissible Difference between fruit in each package
A	200 – 350	180 – 425	112.5
B	351 – 550	251 – 650	150
C	551 – 800	426 – 925	187.5

## 5. PROVISIONS CONCERNING PRESENTATION

### 5.1 UNIFORMITY

The contents of each package must be uniform and contain only mangoes of the same origin, variety, quality and size. The visible part of the contents of the package must be representative of the entire contents.

### 5.2 PACKAGING

Mangoes must be packed in such a way as to protect the produce properly. The materials used inside the package must be new,<sup>2</sup> clean, and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications is allowed, provided the printing or labelling has been done with non-toxic ink or glue.

Mangoes shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of Tropical Fresh Fruit and Vegetables (CAC/RCP 44-1995).

#### 5.2.1 Description of Containers

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the mangoes. Packages (or lot for produce presented in bulk) must be free of all foreign matter and smell.

<sup>2</sup> For the purposes of this Standard, this includes recycled material of food-grade quality.

## **6. MARKING OR LABELLING**

### **6.1 CONSUMER PACKAGES**

In addition to the requirements of the Codex General Standard for the Labelling of Pre-packaged Foods (CODEX STAN 1-1985, Rev. 2-1999), the following specific provisions apply:

#### **6.1.1 Nature of Produce**

If the produce is not visible from the outside, each package shall be labelled as to the name of the produce and may be labelled as to the name of the variety.

### **6.2 NON-RETAIL CONTAINERS**

Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside, or in the documents accompanying the shipment.<sup>3</sup> For produce transported in bulk these particulars must appear on a document accompanying the goods.

#### **6.2.1 Identification**

Name and address of Exporter, Packer and/or Dispatcher. Identification code (optional).<sup>4</sup>

#### **6.2.2 Nature of Produce**

Name of produce if the contents are not visible from the outside. Name of variety and/or commercial type (optional).

#### **6.2.3 Origin of Produce**

Country of origin and, optionally, district where grown or national, regional or local place name.

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<sup>3</sup> Governments, when indicating their acceptance of this Standard, should notify the Commission as to which provisions of this Section apply.

<sup>4</sup> The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark.

#### **6.2.4 Commercial Identification**

- Class;
- Size (size code or weight range in grams);
- Number of units (optional);
- Net weight (optional).

#### **6.2.5 Official Inspection Mark (optional)**

### **7. CONTAMINANTS**

#### **7.1 HEAVY METALS**

Mangoes shall comply with those maximum levels for heavy metals established by the Codex Alimentarius Commission for this commodity.

#### **7.2 PESTICIDE RESIDUES**

Mangoes shall comply with those maximum residue limits established by the Codex Alimentarius Commission for this commodity.

### **8. HYGIENE**

8.1 It is recommended that the produce covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

8.2 The produce 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).