

Note by the secretariat: The Specialized Section proposes to adopt the revisions contained in this text. Additions to the standard in force are underlined and deletions are crossed out.

**UN/ECE STANDARD FFV-48**  
concerning the marketing and commercial  
quality control of

**BROCCOLI (Calabrese)**  
moving in international trade between and to  
UN/ECE member countries

**I. DEFINITION OF PRODUCE**

This standard applies to broccoli of varieties (cultivars) grown from *Brassica oleracea L. convar. botrytis (L.) Alef. var. cymosa Duch.* to be supplied fresh to the consumer, broccoli for industrial processing being excluded.

**II. PROVISIONS CONCERNING QUALITY**

The purpose of the standard is to define the quality requirements of broccoli at the export control stage, after preparation and packaging.

**A. Minimum requirements**

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

- intact; for the purpose of presentation some sprouts may be removed
- 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
- fresh in appearance
- practically free from pests
- practically free from damage caused by pests
- free of abnormal external moisture; in the case where crushed ice is used traces of residual water are not considered to constitute abnormal moisture
- free of any foreign smell and/or taste.

The cut of the floral stem must be clean and as square as possible.

~~Hollowness is~~ Hollow stems are not considered a defect provided the hollow part is sound, fresh and not discoloured.

The development and condition of the broccoli must be such as to enable it:

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

## **B. Classification**

The broccoli is classified in two classes defined below:

(i) ***Class I***

Broccoli in this class must be of good quality. It must be characteristic of the variety and/or commercial type.

The broccoli must be:

- firm and compact
- tightly-grained
- free of defects such as stains or traces of frost.

The buds must be fully closed.

The floral stem must be sufficiently tender and free of woodiness. ~~and hollowness.~~

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:

- a slight defect in shape
- a slight defect in colouring.

Leaves extending above the head may be allowed provided these are ~~small~~, green, sound, fresh and tender.

(ii) ***Class II***

This class includes broccoli which does not qualify for inclusion in Class I, but satisfies the minimum requirements specified above.

The broccoli may be:

- slightly loose and less compact
- less tightly-grained.

The buds must be practically closed.

The floral stem must be reasonably tender, ~~may~~ and may have a trace of woodiness.

The following defects may be allowed provided the broccoli retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape
- defects in colouring
- slight bruising and injury.

Leaves extending above the head may be allowed provided these are, green, sound fresh and

tender.

### III. PROVISIONS CONCERNING SIZING

Size is determined either by the diameter of the floral stem at the cut end or by the maximum diameter of the head.

- (i) For broccoli graded by diameter of the floral stem, the minimum diameter shall be 8 mm. The difference between the smallest and the largest floral stem in each package must not exceed 20 mm.
- (ii) For broccoli graded by the diameter of the head, the minimum diameter shall be 6 cm. However for prepacked or bunched broccoli, the minimum diameter shall be 2 cm. The difference between the smallest and the largest head in each package must not exceed
  - 4 cm if the smallest head has a diameter of less than 10 cm
  - 8 cm if the smallest head has a diameter of 10 cm or more.

For all prepacked or bunched produce, uniformity of size is not required.

In any case, the ratio between the diameter of the head and that of the floral stem in each package must not be less than 2:1.

The broccoli must not exceed 20 cm in height.

### IV. 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.

#### A. Quality tolerances

- (i) **Class I**  
10 per cent by number or weight of broccoli not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class. ~~In addition to the above, 10 per cent by number or weight of broccoli may show hollow stems provided the stem is sound and not discoloured. In no case can there be more than 15 per cent hollow stems.~~
- (ii) **Class II**  
10 per cent by number or weight of broccoli satisfying neither the requirements of the class, nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

#### B. Size tolerances

For all classes: 10 per cent by number or weight of broccoli not satisfying the requirements as regards sizing.

## **V. PROVISIONS CONCERNING PRESENTATION**

### **A. Uniformity**

The contents of each package must be uniform and contain only broccoli of the same origin, variety or commercial type, quality and size (if sized).

Broccoli in Class I must be uniform in colour.

The visible part of the contents of the package must be representative of the entire contents.

### **B. Packaging**

The broccoli must be packed in such a way as to protect the produce properly.

Where crushed ice is used, care must be taken to ensure the heads do not lie in melted water.

The materials used inside the package must be new, clean and of a quality such as to avoid 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.

Packages must be free of all foreign matter.

### **C. Presentation**

The broccoli may be presented in the package:

- vertically
- horizontally.

Broccoli presented vertically must be tightly packaged, but the pressure must not be enough to damage the head. If necessary to allow better packaging of the produce, some heads may be presented horizontally.

Broccoli may be prepacked or bunched.

Pre-packs or bunches in the same package must be of approximately the same weight.

## **VI. PROVISIONS CONCERNING MARKING**

Each package<sup>1</sup> must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

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<sup>1</sup> *Package units of produce prepacked for direct sale to the consumer shall not be subject to these marking provisions but shall conform to the national requirements. However, the markings referred to shall in any event be shown on the transport packaging containing such package units.*

**A. Identification**

Packer            )       Name and address or  
 and/or            )       officially issued or  
 Dispatcher       )       accepted code mark.<sup>2</sup>

**B. Nature of produce**

- "Broccoli", or "Calabrese" if the contents are not visible from the outside.

**C. Origin of produce**

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

**D. Commercial specifications**

- Class
- Size (if sized) expressed by the minimum and maximum diameter (floral stem in mm; head in cm). ~~The indication of the size is not required in case of pre-packed broccoli~~, optional.
- "packed with crushed ice" where appropriate.

**E. Official control mark (optional).**

Published 1994  
 Revised 1997, 1998  
 Last Revised 1999

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<sup>2</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.*