



**Economic and Social  
Council**

Distr.  
GENERAL

TRADE/WP.7/GE.2/2005/7\*

11 April 2005

ORIGINAL: ENGLISH ONLY

---

**ECONOMIC COMMISSION FOR EUROPE**

COMMITTEE FOR TRADE, INDUSTRY AND  
ENTERPRISE DEVELOPMENT

Working Party on Agricultural Quality Standards

Specialized Section on Standardization of  
Dry and Dried Produce (Fruit)

Fifty-second session, 14-17 June 2005

Item 5(b) of the provisional Agenda

**DRAFT UNECE STANDARD FOR INSHELL MACADAMIA NUTS**

Transmitted by the United States

**Note by the secretariat:** This text is a revised proposal for a new UNECE Standard for Inshell Macadamia Nuts reproduced as received by the United States.

---

\* Reissued for technical reasons

**UNECE STANDARD**  
concerning the marketing and commercial  
quality control of

**INSHELL MACADAMIA NUTS**  
Moving in international trade

**I. DEFINITION OF PRODUCE**

This standard applies to inshell macadamia nuts of varieties grown from, *Macadamia integrifolia*, *Macadamia tetraphylla*, *Macadamia ternifolia* and their hybrids intended for direct consumption. It does not apply to inshell macadamia nuts for industrial processing or for use in the food industry.<sup>1</sup>

**II. PROVISIONS CONCERNING QUALITY**

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

**A. Minimum requirements**

**(i) General provisions**

Subject to the special provisions and the tolerances allowed<sup>2</sup> the inshell macadamia nuts must display the following characteristics:

**(a) The shell must be:**

- intact; superficial cracks are not considered a defect provided the kernel is physically protected.
- sound; free from defects likely to affect the natural keeping quality of the fruit
- clean; practically free of any visible foreign matter
- dry; free from abnormal external moisture
- free from residue of husk/hull.
- free of damage caused by pests
- slight superficial damage is not considered as a defect

**(b) The Kernel must be:**

- sufficiently dry to ensure keeping quality,
- intact; slight superficial damage is not considered as a defect,
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- sufficiently developed
- clean, practically free of any visible foreign matter;
- free from insects or mites whatever their stage of development;

---

<sup>1</sup> {One or the other of these sentences (or neither) could be used according to the nature of the produce. }

<sup>2</sup> {This section will specify which of the minimum requirements are not subject to tolerances. }

- free of damage caused by pests;
- free from mould,
- free from rancidity,
- free of foreign smell and/or taste.

The condition of the inshell macadamia nuts must be such as to enable them:

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

(ii) **Moisture content**

The inshell macadamia nuts kernels shall have a moisture content not exceeding 3 per cent.<sup>3</sup> For the kernel and 10% for the whole nut.

(iii) **Preservatives**

Preservatives may be used in accordance with the legislation of the importing country.

**B. Classification**

Inshell macadamia nuts are classified in the classes defined below:

(i) **Class I**

Inshell macadamia nuts in this class must be of good quality. They must have similar characteristic of the variety and/or commercial type.

They must be:

- well developed

The following slight defects may be allowed provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

- slightly stained shell, with stains not covering more than 5% of the shell's surface

(ii) **Class II**

This class includes inshell macadamia nuts which do not qualify for inclusion in the higher class but satisfy the minimum requirements specified above.

The following slight defects may be allowed provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

<sup>3</sup> {The method to be used should be one of the methods tested collaboratively and shown to give satisfactory results in inter-laboratory trials and which are given in Annexes II and I for dried and dry fruit. The laboratory reference method shall be used in cases of dispute. }

- chipped shell provided that the kernel is not damaged
- slightly stained shell with stains not covering more than 20% of the shell's surface
- scratching and markings of the shell not materially detracting in appearance.

### III. PROVISIONS CONCERNING SIZING

Size is optional in all classes, however size is determined by the diameter<sup>4</sup>. The minimum size inshell macadamia nut must be more than 15.87mm (5/8 inch) in diameter.

The following sizes designations are optional:

Size designations	Diameter (mm)
Extra large	28 mm and larger
Large	23 – 28 mm
Medium	18 – 23 mm
Small	15.87 - than 18 mm
Under Size	Less than 15.87 mm

### 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

Defects allowed	Tolerances allowed (per cent by number or weight of defective fruit)	
	Class I	Class II
Total tolerances for the shell not satisfying the minimum requirements	5	7
Of which no more than:		
- loose/foreign extraneous material	1	2
- Macadamia shells with adhering husk/hull	1	2
- Damage by pests (scars)	2	3
- Unopened Cracks	1	2

---

<sup>4</sup> Diameter- the shortest axis of the shell.

Defects allowed	Tolerances allowed (per cent by number or weight of defective fruit)	
	Class I	Class II
Total tolerances for the Kernel not satisfying the minimum	7	10
Of which no more than		
- mould infestation	0.5	1
- decay, rodent injury, insect (other than live insects),	3	5
- off odor, off flavor,	2	3
- Shrunken or shriveled kernels	2	3
- Gum or brown spot	2	3
- Other types of unsound kernels	2	3

*Standard definitions of the defects are listed in Annex I.*

## **B. Size tolerances**

In this class there is no tolerance for inshell macadamia nuts less than 5/8 of an inch in diameter.

## **V. PROVISIONS CONCERNING PRESENTATION**

### **A. Uniformity**

The contents of each package must be uniform and contain only inshell macadamia nuts of the same origin, quality and size (if sized).

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

### **B. Packaging**

Inshell macadamia nuts must be packed in such a way as to protect the produce properly.

The materials used inside the package must be new, 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 that the printing or labeling has been done with non-toxic ink or glue.

Packages must be free of all foreign matter.

### **C. Presentation**

Inshell Macadamia may be presented in solid containers. All consumer packages within each master package must be of the same weight

## **VI. PROVISIONS CONCERNING MARKING**

Each package 6 must bear the following particulars in letters grouped on the same side, legibly and indelibly marked and visible from the outside:

For inshell macadamia nuts transported in bulk these particulars must appear on a document accompanying the goods and be attached in a visible position inside the transport vehicle

### **A. Identification**

Packer	)	Name and address or
and/or	)	officially issued or
Dispatcher	)	accepted code mark

### **B. Nature of produce**

- Name of the produce;
- Name of the variety and/or commercial type
- Type or style

### **C. Origin of produce**

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

### **D. Commercial specifications**

- Class;
- Size
- Crop year {optional};
- Net weight, or the number of pre-packages, followed by the net unit weight in the case of packages containing such units (optional or at the request of the importing country).
- "Best before" followed by the date (optional)

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

\* \* \* \*