

INF.7 Proposal for a new UNECE Standard: Inshell Macadamia Nuts

Contribution from the United States of America

Note by the secretariat: This text is a revised proposal¹ for a new UNECE Standard for Inshell Macadamia Nuts reproduced as received from the United States.

¹ Reissued for technical reasons

UNECE STANDARD
concerning the marketing and commercial
quality control of

INSHELL MACADAMIA NUTS

I. DEFINITION OF PRODUCE

[This standard applies to inshell macadamia nuts of varieties grown from, *Macadamia integrifolia*, *Macadamia tetraphylla*, *Macadamia ternifolia* author's name -Maiden & E.Betche and their hybrids, intended for direct consumption. It does apply to inshell macadamia nuts for industrial processing or for use in the food industry]

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 the inshell macadamia nuts must display the following characteristics:

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

- intact; superficial cracks or slight superficial damage 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
- free from mould filaments visible to the naked eye-free from live insects or mites whatever their stage of development

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

- sufficiently dry to ensure keeping quality,
- sound; produce affected by rotting or deterioration such as to make it unfit for

consumption is excluded

- sufficiently developed
- free from live insects or mites whatever their stage of development;
- free of damage caused by pests;
- free from mould filaments visible to the naked eye,
- 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**

Inshell macadamia nuts kernels shall have a moisture content not exceeding 3.0 per cent.²

(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 be 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 shells

² *The moisture content is determined by one of the methods given in Annex II of the Standard Layout - Determination of Moisture Content for Dry Fruit. (http://www.unece.org/trade/agr/info/layout/laydry_e.pdf). The laboratory reference method shall be used in cases of dispute.*

(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 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.

- 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.

III. PROVISIONS CONCERNING SIZING

[Sizing is optional in all classes.

Size is determined by the diameter³.

The minimum size inshell macadamia nut must not be less 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 - 18 mm
Under Size	Less than 15.87 mm

Uniformity in size is expressed by:

- a size range defined by a maximum size and a minimum size which must not exceed 5 mm of difference or,
- screening defined as a minimum size in diameter]

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.

³ Diameter- the shortest axis of the shell.

A. Quality tolerances

Defects allowed	Tolerances allowed (per cent by number or weight of defective inshell macadamia nut)	
	Class I	Class II
(a) 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
(b) Total tolerances for the Kernel not satisfying the minimum requirements	7	10
Of which no more than:		
- mould	0.5	1 ⁴
- foreign smell and/or taste	2	3
- Shrunken or shriveled kernel	2	3
- Gum or brown spot	2	3
[- Other types of unsound kernels]	2	3
- Deterioration, damage by pest	3	5
(c) Tolerances for other defects (not included in total tolerances) :		
- Live insects or mites	0	0

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 15.87mm (5/8 of an inch) in diameter.]

⁴ Reservation from Poland requesting 0.5 per cent tolerance for all classes.

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.

[Uniformity in size is expressed by:

- a size range defined by a maximum size and a minimum size which must not exceed ± 5 mm of difference or,
- screening defined as a minimum size in diameter]

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 bags or solid containers. All consumer packages within each package must be of the same weight

VI. PROVISIONS CONCERNING MARKING

Each package⁵ must bear the following particulars in letters grouped on the same side, legibly and indelibly marked and visible from the outside:

A. Identification

Packer)	Name and address or
and/or)	officially issued or
Dispatcher)	accepted code mark ⁶

B. Nature of produce

⁵ Package units of produce prepacked for direct sale to the consumer shall not be subject to these marking provisions but shall conform to national requirements. However the markings referred to shall in any event be shown on the transport packaging containing such package units.

⁶ The national legislation of a number of European countries requires the explicit declaration of the name and address. 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.

- Inshell macadamia nuts;
- Name of variety and /or commercial type (optional)

C. Origin of produce

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

D. Commercial specifications

- Class;
- Size (optional)
- Crop year (optional); mandatory according to the legislation of the importing country.-
- Net weight, or the number of consumer 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)

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