

## **INF.10      Proposal to review UNECE Standard: DF-03, Inshell Hazelnuts**

### **Contribution from Germany (2005)**

This proposal follows the amendments elaborated for the UNECE recommendation for inshell almonds at the session of the Specialized Section for the Standardization of Dry and Dried Fruit in 2004 and 2005.

**UNECE STANDARD DDF-03**  
concerning the marketing and commercial quality control of

**INSHELL HAZELNUTS**

**I. DEFINITION OF PRODUCE**

This standard applies to inshell hazelnuts free from involucre or husk of varieties (cultivars) grown from *Corylus avellana* L. and *Corylus maxima* Mill. and their hybrids, ~~without involucre or husk and which are~~ intended for direct consumption.

It does ~~not~~ apply to inshell hazelnuts 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 for inshell hazelnuts at the export control stage, after preparation and packaging.

**A. Minimum requirements <sup>1</sup>**

(i) In all classes subject to the special provisions for each class and the tolerances allowed, ~~the~~ inshell hazelnuts must ~~be~~display the following characteristics:

- (a) ~~Characteristics of the shell~~The shell must be:
- ~~— well formed; shell is not noticeably misshapen;~~
  - intact; ~~a~~slight superficial damage is not considered as a defect provided the kernel is physically protected;
  - sound; free from defects likely to affect the natural keeping quality of the ~~fruit~~inshell hazelnut;
  - clean; practically free of any visible foreign matter;
  - ~~free from residues of adhering husk affecting in aggregate more than 5 per cent of the total shell surface.~~
  - ~~free from living~~live insects or mites whatever their stage of development;
  - ~~free from damage caused by pests, including the presence of dead insects, insect debris or excreta;~~
  - ~~free from mould filaments visible to the naked eye;~~
  - ~~dry;~~ free of abnormal external moisture;
  - ~~free from blemishes, areas of discoloration or spread stains in pronounced contrast with the rest of the shell affecting in aggregate more than 25 per cent of the surface of the shell;~~
  - well formed; not noticeably misshapen.

- (b) ~~Characteristics of the kernel~~The kernel must be:
- ~~intact; slight superficial damage is not considered as a defect;~~

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<sup>1</sup> Definitions of terms and defects are listed in Annex III of the Standard Layout – Recommended Terms and Definition of Defects for Standards of Dry Fruits (Inshell Nuts and Nut Kernels) and Dried Fruits ([http://www.unece.org/trade/agr/info/layout\\_e.pdf](http://www.unece.org/trade/agr/info/layout_e.pdf)). ~~Standard definitions of terms and defects are listed in the Annex of this document~~

- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- sufficiently developed; ~~shrunk or shrivelled~~ kernels, when the affected part represents ~~or kernels with desiccated, dried out or tough portions affecting more than 25 per cent of the kernel and empty shells are to be excluded;~~ ~~empty, shrunk or shrivelled fruit are to be excluded;~~
- free from ~~living live or dead~~ insects or mites whatever their stage of development;
- free from damage caused by pests, including the presence of dead insects, insect debris or excreta;
- free from mould filaments visible to the naked eye;
- free from rancidity;
- ~~— free of abnormal external moisture;~~
- free of foreign smell and/or taste;
- free from blemishes, areas of discoloration or spread stains in pronounced contrast with the rest of the kernel affecting in aggregate more than 25 per cent of the surface of the kernel;

Inshell hazelnuts must be harvested when fully ripe.

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

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

(ii) Moisture Content

Inshell hazelnuts shall have a moisture content ~~of~~ not exceeding ~~12~~ 12.0 per cent for the whole ~~hazelnut nut~~ and ~~7~~ 7.0 per cent for the kernel. <sup>2</sup>

## B. Classification

Inshell hazelnuts are classified in three classes ~~defined below:~~

"Extra" Class,

Class I,

Class II.

Classification is based on the defects allowed in Section IV. PROVISIONS CONCERNING TOLERANCES. The tolerances must not affect the general appearance of the produce, the quality, keeping quality and presentation in the package.

~~(i) "Extra" Class~~

<sup>2</sup> *The moisture content is determined by one of the methods given in Annex II of the Standard Layout – Determination of Moisture content for dry produce (nuts) ([http://www.unece.org/trade/agr/info/layout/laydry\\_e.pdf](http://www.unece.org/trade/agr/info/layout/laydry_e.pdf)). The laboratory reference method shall be used in cases of dispute.*

~~The inshell hazelnuts in this class must be of superior quality. They must be characteristic of the variety and/or commercial type.<sup>4</sup> and uniform in shape and appearance.~~

~~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 and presentation in the package.~~

~~The defects allowed in Section IV. PROVISIONS CONCERNING TOLERANCES must not affect the general appearance of the produce, the quality, keeping quality and presentation in the package.~~

(ii) — ***Class I***

~~Inshell hazelnuts in this class must be of good quality. They must be characteristic of the variety and/or commercial type.<sup>3</sup>~~

~~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.~~

~~The defects allowed in Section IV. PROVISIONS CONCERNING TOLERANCES must not affect the general appearance of the produce, the quality, keeping quality and presentation in the package.~~

(iii) — ***Class II***

~~This class includes inshell hazelnuts which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified above. Inshell hazelnuts in this class must be of marketable quality.~~

~~Defects may be allowed provided the inshell hazelnuts retain their essential characteristics as regards the quality, keeping quality and presentation.~~

~~The defects allowed in Section IV. PROVISIONS CONCERNING TOLERANCES must not affect the essential characteristics of the produce as regards the quality, keeping quality and presentation.~~

### III. PROVISIONS CONCERNING SIZING

*Remark: The provisions concerning sizing are simplified with regard to the size groups. In the existing standard the size codes refer to distinctive 2 mm steps. But in case the produce is graded in a country using inch instead of mm, this does not work. Therefore, the proposal is to define the range but not the steps.*

Sizing is compulsory for inshell hazelnuts in Classes "Extra" and "I".

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<sup>3</sup> — ~~Commercial Type: Means that the hazelnuts in each container are of the similar general type and appearance or belong to a mix of varieties officially defined by the producing country.~~

~~Sizing or Screening~~Size is determined by the maximum diameter of the equatorial section.

~~The minimum size is 16 mm for "Extra" Class, 14 mm for Class I and 12 mm for Class II.~~

~~It~~ Uniformity in size is expressed ~~either~~ by:

- ~~- a size range defined an interval determined~~ by a maximum size and a minimum size which must not exceed 2 mm of difference or
- ~~- (sizing), screening defined as a minimum size in diameter. or by mentioning the minimum size following by the words "and over", or the maximum size followed by the words "and less" (screening).~~ Sizing is compulsory for produce in classes "Extra" and "I" but optional for produce in Class "II". The following classification is laid down:

<del>Size<sup>a</sup></del>	<del>Screening<sup>a</sup></del>
<del>22 and above</del>	<del>22 mm and above (or and less)—</del>
<del>20 to 22 mm</del>	<del>20 mm and above (or and less)</del>
<del>18 to 20 mm</del>	<del>18 mm and above (or and less)</del>
<del>16 to 18 mm</del>	<del>16 mm and above (or and less)</del>
<del>14 to 16 mm</del>	<del>14 mm and above (or and less)</del>
<del>12 to 14 mm</del>	

<sup>a</sup> ~~—————In addition to this size table, provided that the size or screen in millimetres is also expressed in the marking, any size including larger sizes may be used with option size names.~~

~~Only inshell hazelnuts with a diameter equal to or above 16 mm may be included in the "Extra" class, and in Class "I" only those with a diameter equal to or above 14 mm. For produce presented to the final consumer under the classification screened, the size "and less" is not allowed.~~

#### IV. PROVISIONS CONCERNING TOLERANCES

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

## A. Quality tolerances

<del>Permitted defects</del> <u>Defects allowed</u>	<b>Tolerances allowed</b> (per cent of defective <del>fruit</del> <u>inshell hazelnuts</u> by <del>weight</del> <u>number</u> count or weight (with <u>regard to the total inshell weight basis</u> ))		
	<b>Extra</b>	<b>Class I</b>	<b>Class II</b>
(a) Total tolerance for <u>inshell hazelnuts not satisfying the minimum requirements for the shell</u> ( <del>by number</del> ) <del>defects of shell (calculated on the total inshell weight basis)</del> <u>of which no more than</u> - <u>inshell hazelnuts [with residue of adhering husk [and/or affected by stains of discoloration ], damaged by pests, mould, rotting or deterioration</u>	3 <sup>a</sup> [ <u>5</u> ]  <u>1</u>	5 [ <u>10</u> ]  <u>3</u>	7 [ <u>15</u> ]  <u>5</u>
(b) Total tolerances for inshell hazelnuts not satisfying the minimum requirements for the <b>kernel</b> ( <del>by number</del> ) <u>of which no more than</u> - <u>rancid or damaged by pests, rotting, deterioration</u> - <u>mouldy</u> - <u>not sufficiently developed or empty nuts</u>	5 <sup>b</sup>  <u>2</u> <u>0.5</u> <u>2</u>	8 <sup>c</sup> [ <u>10</u> ]  <u>5</u> <u>1</u> <u>5</u>	12 <sup>c</sup> [ <u>15</u> ]  <u>7</u> <u>2</u> <u>7</u>
<del>Total tolerances for defects of the kernel (calculated on the kernel weight basis)</del> <del>of which mouldy, rotten, rancid<sup>d</sup> or damaged by insects<sup>e</sup> (calculated on the kernel weight basis)</del>	<del>5<sup>b</sup></del> <del>3<sup>b-f</sup></del>	<del>8<sup>e</sup></del> <del>5<sup>f</sup></del>	<del>12<sup>e</sup></del> <del>6<sup>f</sup></del>
(c) <u>Tolerances for other defects (not included in total tolerances)</u>			
- <del>foreign matter (calculated on the total inshell weight basis)</del> including loose shells, shell fragments, fragments of hull, dust ( <del>by weight</del> )	<del>0.25</del> [ <u>1</u> ]	<del>0.25</del> [ <u>3</u> ]	<del>0.25</del> [ <u>5</u> ]
- <del>living live insects and mites (by number)</del>	<del>0</del>	<del>0</del>	<del>0</del>
- <u>inshell hazelnuts belonging to other varieties than that indicated on the package (by number)</u>	<u>10</u>	<u>10</u>	<u>10</u>
- <del>Empty nuts (calculated by count)</del>	<del>4</del>	<del>6</del>	<del>8</del>

<sup>a</sup> Reservation by the US delegation requesting 4% for Extra Class.

<sup>b</sup> Reservation by Romania requesting a 1% tolerance for mouldy in Extra Class. Romania agrees with the 3% total tolerance in Extra Class for mouldy, rotten, rancid or damaged by insects or animal pests.

<sup>e</sup> ~~In calculating these percentages, a slight deformation of the kernel is not considered to be a defect.~~

~~<sup>d</sup> — An oily appearance of the flesh does not necessarily indicate a rancid condition.~~

~~<sup>e</sup> — Living insects or animals are inadmissible in any class whatsoever.~~

<sup>f</sup> Reservation by Poland requesting 0.5% tolerance for mouldy. Any trace of damage by rodents is a disqualifying defect.

~~For Extra Class and Class I, there may be a maximum of 12 per cent by number or weight of inshell hazelnuts belonging to different varieties or commercial types. These allowances are also applicable to Class II in case the variety or commercial type is indicated.~~

**~~B. — Mineral impurities~~**

~~Ashes insoluble in acid must not exceed 1g/kg.~~

**B. Size tolerances**

For all classes, ~~a maximum of~~ 10 per cent, by ~~number count~~ or weight, of inshell hazelnuts not conforming to the size indicated ~~is tolerated~~ are allowed provided:

- the nuts correspond to the sizes immediately below or above when the size is designated by ~~an interval~~ a range determined by the minimum diameter and the maximum diameter ~~(sizing)~~;

- the nuts correspond to the size immediately below when the size is designated by an indication of the minimum diameter followed by "and above" or "and +" ~~(screening)~~;

~~the nuts correspond to the size immediately above when the size is designated by an indication of the maximum size followed by the words "and less" or "and %" (screening).~~

## V. PROVISIONS CONCERNING PRESENTATION

### A. Uniformity

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

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

### B. Packaging

Inshell hazelnuts 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 the printing or labelling has been done with non-toxic ink or glue.

[Stickers individually affixed on the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects.]

Packages must be free of all foreign matter.

### C. Presentation

Inshell hazelnuts must be presented in bags ~~and~~/or solid containers. All ~~pre-packages~~consumer packages within each package must be of the same weight.

## VI. PROVISIONS CONCERNING MARKING

Each package<sup>4</sup> 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 <sup>5</sup>

<sup>4</sup> Consumer packages for direct sale to the consumer shall not be subject to these marking provisions but shall conform to national requirements of the importing country. However, the markings referred to shall in any event be shown on the transport packaging containing such package units.



~~Shipping mark (where applicable). The shipping mark must correspond with the shipping mark on the Bill of Lading.~~

## B. Nature of produce

- "Inshell Hazelnuts".
- Name of the variety ~~or commercial type for classes "Extra" and I (optional for Class II).~~

## C. Origin of produce

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

## D. Commercial specifications

- Class
- Size (if sized) expressed by:
  - the minimum and maximum diameters (~~sizing~~), or
  - the minimum diameter followed by the words "and above" or "and +" ~~or the maximum diameter followed by the words "and less" or "and "~~ (screening); ~~in addition, size name (optional).~~
- Size name (optional)
- Crop year (optional).<sup>6</sup>
- "Best before" followed by the date (optional).
  - ~~Weight (gross or net).<sup>7</sup> If the gross weight is indicated, the tare must not exceed 2.5 per cent for sacks of 50 kg and above, and 3.0 per cent for sacks of lesser weight. If the nuts are presented in double sacks other than paper or polyethylene, the net weight must be indicated.~~
- Net weight, or number of pre-packages followed by net unit weight for packages containing pre-packages.
- Crop year (optional).<sup>8</sup>

## E. Official control mark (optional)

This standard was first published in 1970 as UNECE Standard for Unshelled Hazel Nuts  
Revised 1991, 2000

<sup>5</sup> ~~The national legislation of a number of *European* 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.~~

<sup>6</sup> ~~Mandatory, at the request of the importing country.~~

<sup>7</sup> ~~Net weight has to be indicated at the request of the importer or the importing country.~~

<sup>8</sup> ~~Mandatory, at the request of the importing country.~~

Alignment with the Standard Layout 2003

The UNECE Standard for Unshelled Hazel Nuts  
has led to the development of an explanatory brochure published by the OECD Scheme

## ~~ANNEX: DEFINITIONS OF TERMS AND DEFECTS FOR INSHELL HAZELNUTS~~

~~Based on Annex III of the Standard Layout~~

~~Cracks or splitting : Any crack which is open and conspicuous, and larger than one fourth the circumference of the shell.~~

~~Defects of shell : Any defect affecting the shell but not the kernel.~~

~~Dry : Means that the shell is free from surface moisture, and that the shells and kernels combined do not contain more than 12 per cent moisture.~~

~~Empty : Means a hazelnut containing no kernel.~~

~~Foreign matter : Any matter not normally associated with the product.~~

~~Insect damage : Visible damage caused by insects or animal parasites or the presence of dead insects or insect debris.~~

~~Intact : Means that the shell is not broken, split or mechanically damaged; a slight crack is not considered as a defect provided the kernel is still protected.~~

~~Mould : Mould filaments visible to the naked eye either on the outside or on the inside of the kernel.~~

~~Rancidity : Oxidation of lipids or free fatty acids producing a disagreeable flavour. An oily appearance of the flesh does not necessarily indicate a rancid condition.~~

~~Rotten/Decay : Significant decomposition caused by the action of micro organisms.~~

~~Shrivelled : The wrinkling of more than 50% of the skin surface of the compact fruit, usually occurring in seasons when there are high crop yields, or when there is stress from drought or poor nutrition, or as an inherited trait.~~

~~Shrunken : A condition yielding undeveloped firm fruit obtained after fertilization during rapid kernel growth in extremely high temperatures.~~

~~Well formed : Means that the shell is not noticeably misshapen and that its shape concords with the characteristic varietal or commercial type.~~